

Village of Bear Lake

HIGH LEAD LEVEL INVESTIGATION

MIKE SMITH



102 W. Washington Street, Suite 213
Marquette, Michigan 49855
906-273-1568
meadhunt.com

February 5, 2016

Background

In July 2015 the Village of Bear Lake collected “First Draw” (collecting the water sample directly from a kitchen faucet without running water to waste first) Lead and Copper samples from five homes (see attachment for all sample locations and their respective results) connected to the drinking water system. The water samples were analyzed by the State of Michigan Department of Environmental Quality Laboratory in Lansing.

Four of the five samples analyzed in July 2015 detected Lead concentrations well below 15 parts per billion (ppb) in one liter of water. The Action Level (AL) as established by the Environmental Protection Agency (EPA) is the 90th percentile for samples of lead detection greater than 15 ppb. The water sample collected at 7828 Locust Street in July 2015 detected a Lead concentration of 24 parts per billion (ppb). The 90th percentile for Lead Concentration for the water samples collected in July 2015 is 14.5 ppb.

It was suggested by the MDEQ Cadillac District Engineer who is responsible for the oversight of the Village of Bear Lake Water Supply that an investigation be conducted as to why the Lead concentration in the water sample collected at 7828 Locust Street in July 2015 is higher than in the previous sampling periods (see table 1):

Table 1

Year	Lead Concentration (ppb)
2015	24
2012	3
2009	7
2006	5
2003	9
2000	9
1997	9
1996	ND*
1995	ND*
1994	3
1993	5

* Non- Detectable

Investigation

In reviewing the water analysis from the wells in 2009, no Lead was detected from the Village's groundwater sources. On February 3, 2016 Mead & Hunt Water/Wastewater Technician and Water Operator for the Village of Bear Lake conducted a visual survey of the plumbing at 7828 Locust Street. It was determined that the incoming water service line is 1¼ inch galvanized pipe and the plumbing in the dwelling is copper with soldered connections and joints that was installed prior to 1985. This indicates a likelihood that the solder used is lead-based which has since been banned (1985) for use in drinking water plumbing. The water service is most likely connected to the watermain with a "Goose Neck" connection that is manufactured from lead and brass alloys. The Village was correct in listing the dwelling as a Tier 2 candidate for Lead and Copper Testing per the EPA/MDEQ Regulations. Upon inspection of the kitchen faucet where the water sample was collected, the aerator was removed from the faucet and a large amount of sediment and metal debris was evident.

An interview of the caretaker responsible for the collection of the water sample in July 2015 revealed that he did follow the instructions provided by the Village for collection of a first draw water sample. However, the home had not been occupied for a period of time and the caretaker was not instructed to utilize the plumbing system to simulate "Normal" water use 6 to 24 hours prior to the collection of the First Draw water sample.

Results of the Investigation and Recommendation

Since the home is a seasonal residence, the plumbing system was flushed the afternoon of February 2nd to simulate "Normal" water usage prior to the collection of a "First Draw" water sample in the late morning of February 3, 2016.

The water sample collected on February 3, 2016, was analyzed by SOS Analytical in Traverse City and the lead concentration is 9 ppb. The concentration is normal for the water service type and older copper plumbing and fixtures. Our conclusion through interviews, water analysis, and historic data indicates that there may have been a break in sampling protocol when dealing with a seasonal home or, through normal surging in the water supply, flaking (sloughing) of plumbing material may have been introduced into the water sample in July 2015 that may have skewed the water analytical results.

The watermain on Locust Street is slated to be replaced in late 2016 or early 2017 and the "Goose Neck" fitting on the old water connection will be removed and a new water service will be installed to the property line at 7828 Locust Street.

Mead and Hunt recommends that the future sampling collection be performed by the water operator at the appropriate fixtures and at a reasonable time for a First Draw of water. For seasonal homes, access to the dwelling needs to be granted to the water operator (under the supervision of the caretaker or maintenance person) so the plumbing can be utilized to simulate "Normal" water usage as determined by the EPA/MDEQ 6-24 hours prior to sample collection.

Respectfully Submitted,

Michael Smith
Project Manager

From: Conradson, Scott (DEQ) <CONRADSONS1@michigan.gov>
Sent: Monday, February 01, 2016 11:06 AM
To: Mike Smith; Ben Heymes
Cc: jeffbair4@gmail.com; Bloemker, Jon (DEQ)
Subject: Bear Lake

Gentlemen,

Even though the latest Pb/Cu sampling round for Bear Lake was below the overall compliance Action Levels of 15 and 600 ppb's respectively there was one residential sample that was above the AL for lead. Per our discussion please investigate the situation at 7828 Locust Street in Bear Lake with regards to lead sampling results showing 24 ppb. Please provide a written response to what may be the cause of this elevated number as all previous sampling from this address have been below the 15 ppb Action Level. Thank you for your attention to this issue. Please ensure the home owner is notified of the situation and any precautionary actions they need to take to protect themselves.

**Scott A. Conradson, District Engineer
Field Operations Section – Cadillac District Office
Office of Drinking Water and Municipal Assistance
Michigan Department of Environmental Quality
120 West Chapin Street, Cadillac Michigan 49601
Direct (231)-876-4461 Fax (231) 775-4050**

00510
Monister
LEAD & COPPER

Robinson, Krista (DEQ)

From: Robinson, Krista (DEQ)
Sent: Thursday, September 17, 2015 9:48 AM
To: Bair, Jeff
Cc: Heymes, Ben; Ware, Melanie
Subject: 2015 Lead and Copper Monitoring Results

We received your lead and copper monitoring results, reporting form, and certification of lead consumer notice. The results of your monitoring are as follows. **Please retain for your records.**

WSSN: 00510 Supply Name: Village of Bear Lake

Action Levels	90 th Percentile	# of Samples Above Action Level
Lead 15 parts per billion (ppb)	14.5 ppb	1
Copper 1300 parts per billion (ppb)	600 ppb	0

These results must be reported on your 2015 Consumer Confidence Report (CCR) due to our office, your customers and the local health department by July 1, 2016. Also include the following statement in the CCR, regardless of the lead and copper levels:

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. [NAME OF UTILITY] is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at 1-800-426-4791 or at <http://water.epa.gov/drink/info/lead>.

Please contact me if you have questions.

Thank you,

Krista Robinson
Environmental Quality Analyst
Office of Drinking Water and Municipal Assistance
Michigan Department of Environmental Quality
Phone: 231-876-4481
Fax: 231-775-4050
robinsonk24@michigan.gov

#00510
Manistee

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF DRINKING WATER AND MUNICIPAL ASSISTANCE
**LEAD AND COPPER REPORT AND
CONSUMER NOTICE OF LEAD RESULT
CERTIFICATE FOR COMMUNITY WATER SUPPLY**



Issued under authority of 1976 PA 399, MCL 325.1001 *et al.*, and Administrative Rules, as amended.
Failure to submit this information is a violation of Act 399 and may subject the water supply to enforcement penalties.

Administrative Rule R 325.10710d requires water supplies to report lead and copper monitoring information within 10 days after the end of the monitoring period. This form may be used to meet this requirement. Submit the information to the appropriate Department of Environmental Quality (DEQ) district office. For district office addresses, visit www.michigan.gov/deq and click on Locations.

1. Water Supply Name: Village of Bear Lake
2. County: Manistee 3. WSSN: 00510
4. Population: 318 5. Monitoring Period: From: 6/1/15 To: 9/30/15
6. Minimum # of Samples Required: 5 7. # of Samples Taken: 5
8. Name of Certified Laboratory: MDEQ Drinking Water Lab

9. SAMPLE CRITERIA:

Yes	No	Explain No responses in Comments block.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	a. Are the same sampling points used as in the previous monitoring period?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. Are all samples from Tier 1 sites?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	c. Are all samples from Tier 1, 2, or 3 sites giving Tier 1 priority?
<input type="checkbox"/>	<input type="checkbox"/>	d. If no Tier 1, 2, or 3 sites are available, do all sites have plumbing materials commonly found at other locations in the system?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	e. Is the minimum number of lead service line samples taken (when applicable)?

Comments:

For more information see *Instructions* paragraph 11, subparagraph "Sample Category."

10. NAME:

Name: Ben Heymes
Title: Operator in Charge Phone: (231)409-3115 Date: 9/2/15

RECEIVED
SEP 11 2015

MDEQ-ODWMA
CADILLAC OFFICE

Consumer Notice of Lead Result in Drinking Water

Water Supply Name: Village of Bear Lake
 County: Manistee WSSN: 00510
 Sample Location: 12051 West St Date Sampled: 7/8/15

Thank you for participating in the lead and copper monitoring of drinking water. The levels of lead and copper found at your location are in the table below.

Key to Table	Contaminant	AL	MCLG	Your Result
Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow. Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety. ppb: parts per billion or micrograms per liter.	Lead (ppb)	15	0	5
	Copper (ppb)	1300	1300	340

Lead can cause serious health problems if too much enters your body from drinking water or other sources. It can cause damage to the brain and kidneys, and it can interfere with the production of red blood cells that carry oxygen to all parts of your body. The greatest risk of lead exposure is to infants, young children, and pregnant women. Scientists have linked the effects of lead on the brain with lowered IQ in children. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults. Lead is stored in the bones, and it can be released later in life. During pregnancy, the child receives lead from the mother's bones, which may affect brain development.

To reduce exposure to lead in drinking water:

- *Run your water to flush out lead.* Run the water until it becomes cold.
- *Use cold water for cooking and preparing baby formula.* Do not cook with or drink water from the hot water tap; lead dissolves more easily in hot water.
- *Do not boil water to remove lead.* Boiling water will not reduce lead levels.
- *Look for alternative sources or treatment of water.* If your lead result is above 15 ppb, you may want to consider purchasing bottled water or a water filter. Read the package to be sure the filter is approved to reduce lead or contact NSF International at 800-NSF-8010, or www.nsf.org for information on performance standards for water filters.
- *Identify if your plumbing fixtures contain lead.* New faucets, fittings, and valves, may contain up to 8 percent lead including those advertised or labeled as "lead-free" and may contribute lead to drinking water. Consumers should be aware of this when choosing fixtures and take appropriate precautions.

Although the primary sources of lead exposure for most children are deteriorating lead-based paint, lead-contaminated dust, and lead-contaminated soil, the U.S. EPA estimates that 10 to 20 percent of human exposure to lead may come from drinking water.

For more information, contact us at: _____ (231)864-4300.
 For more information on reducing lead exposure around your home and the health effects of lead, visit the U.S. EPA's Web site at www.epa.gov/lead, call the National Lead Information Center at 800-424-LEAD, or contact your health care provider.

Certification: _____ WSSN: 00510
 I certify that this public water supply has provided the consumer notice of lead result to persons served at each of the taps that was tested, either by mail or by another method approved by the DEQ, within 30 days of knowing the result. The Notice includes required content.
BCB _____ OPERATOR IN CHARGE _____ 9-16-15
 Signature Title Date Sent to Consumer
 Reminder to water supplier: Complete this certification on only one (1) example copy of a notice sent to a consumer and submit it to the DEQ.

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
DRINKING WATER LABORATORY



USEPA Region V Drinking Water Cert. No. MI00003
 P.O. Box 30270
 Lansing, MI 48909
 TEL: (517) 335-8184
 FAX: (517) 335-8562

Sample Number
LF72140

Official Laboratory Report

Report To: BEAR LAKE VILLAGE
 7780 LAKE ST
 PO BOX 175
 BEAR LAKE MI 49614

System Name/Owner:	BEAR LAKE VILLAGE	WSSN/Pool ID:	0510
Collection Address:	12036 LYNN ST, BEAR LAKE	Source:	TYPE I
Collected By:	CAROL URBANUS	Site Code:	
Township/Well#/Section:	BEAR LAKE//	Collector:	Private Citizen
County:	Manistee	Date Collected:	07/09/2015 07:00
Sample Point:		Date Received:	07/11/2015 11:32
Water System:	Treated Public Distribution System	Purpose:	Routine Monitoring

TESTING INFORMATION			REGULATORY INFORMATION			
Analyte Name	Result (mg/L)	Date Tested	RL (mg/L)	MCL/AL (mg/L)	Method	CAS #
Copper	0.27	07/15/2015	0.05	1.3	EPA 200.8	7440-50-8
Lead	0.002	07/15/2015	0.001	0.015	EPA 200.8	7439-92-1

The analyses performed by the MDEQ Drinking Water Laboratory were conducted using methods approved by the U.S. Environmental Protection Agency in accordance with the Safe Drinking Water Act, 40 CFR parts 141-143, and other regulatory agencies as appropriate.

Your local health department has detailed information about the quality of drinking water in your area. If you have concerns about the health risks related to the test results of your sample, please contact the Environmental Health Section through the address and telephone number listed below:

District Health Department #10
 385 Third Street
 Manistee, MI 49660
 231 723-3595

	90%	avg	max	# over
Pb	14.5	7.0	24	1
Cu	600	320	860	0

RECEIVED
 JUL 15 2015
 MDEQ-ODWMA
 CADILLAC OFFICE

CAS# : Chemical Abstract Service Registry Number	mg/L : milligrams / Liter (ppm)	Laboratory Contacts
MCL : Maximum Contaminant Level	ppm : parts per million	Drinking Water Unit Mgr: Julia Pieper
AL : Action Level	MPN : Most Probable Number	Systems Mgmt. Unit Mgr: George Krisztian
RL : Reporting Limit	CFU : Colony Forming Unit	

**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
DRINKING WATER LABORATORY**



USEPA Region V Drinking Water Cert. No. MI00003
P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-8184
FAX: (517) 335-8562

**Sample Number
LF72141**

Official Laboratory Report

Report To: BEAR LAKE VILLAGE
7780 LAKE ST
PO BOX 175
BEAR LAKE MI 49614

System Name/Owner:	BEAR LAKE VILLAGE	WSSN/Pool ID:	0510
Collection Address:	12459 RONNING ST, BEAR LAKE	Source:	TYPE I
Collected By:	RED RONNING	Site Code:	
Township/Well#/Section:	BEAR LAKE//	Collector:	Private Citizen
County:	Manistee	Date Collected:	07/07/2015 18:00
Sample Point:		Date Received:	07/11/2015 11:33
Water System:	Treated Public Distribution System	Purpose:	Routine Monitoring

TESTING INFORMATION			REGULATORY INFORMATION			
Analyte Name	Result (mg/L)	Date Tested	RL (mg/L)	MCL/AL (mg/L)	Method	CAS #
Copper	Not detected	07/15/2015	0.05	1.3	EPA 200.8	7440-50-8
Lead	0.001	07/15/2015	0.001	0.015	EPA 200.8	7439-92-1

The analyses performed by the MDEQ Drinking Water Laboratory were conducted using methods approved by the U.S. Environmental Protection Agency in accordance with the Safe Drinking Water Act, 40 CFR parts 141-143, and other regulatory agencies as appropriate.

Your local health department has detailed information about the quality of drinking water in your area. If you have concerns about the health risks related to the test results of your sample, please contact the Environmental Health Section through the address and telephone number listed below:

**District Health Department #10
385 Third Street
Manistee, MI 49660
231 723-3595**

CAS# : Chemical Abstract Service Registry Number
MCL : Maximum Contaminant Level
AL : Action Level
RL : Reporting Limit

mg/L : milligrams / Liter (ppm)
ppm : parts per million
MPN : Most Probable Number
CFU : Colony Forming Unit

Laboratory Contacts
Drinking Water Unit Mgr: Julia Pieper
Systems Mgmt. Unit Mgr: George Krisztian

**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
DRINKING WATER LABORATORY**



USEPA Region V Drinking Water Cert. No. MI00003
P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-8184
FAX: (517) 335-8562

**Sample Number
LF72142**

Official Laboratory Report

Report To: BEAR LAKE VILLAGE
7780 LAKE ST
PO BOX 175
BEAR LAKE MI 49614

System Name/Owner:	BEAR LAKE VILLAGE	WSSN/Pool ID:	0510
Collection Address:	12064 WISE ST, BEAR LAKE	Source:	TYPE I
Collected By:	DIANE WARE	Site Code:	
Township/Well#/Section:	BEAR LAKE//	Collector:	Private Citizen
County:	Manistee	Date Collected:	07/08/2015 15:30
Sample Point:		Date Received:	07/11/2015 11:33
Water System:	Treated Public Distribution System	Purpose:	Routine Monitoring

TESTING INFORMATION			REGULATORY INFORMATION			
Analyte Name	Result (mg/L)	Date Tested	RL (mg/L)	MCL/AL (mg/L)	Method	CAS #
Copper	0.13	07/15/2015	0.05	1.3	EPA 200.8	7440-50-8
Lead	0.003	07/15/2015	0.001	0.015	EPA 200.8	7439-92-1

The analyses performed by the MDEQ Drinking Water Laboratory were conducted using methods approved by the U.S. Environmental Protection Agency in accordance with the Safe Drinking Water Act, 40 CFR parts 141-143, and other regulatory agencies as appropriate.

Your local health department has detailed information about the quality of drinking water in your area. If you have concerns about the health risks related to the test results of your sample, please contact the Environmental Health Section through the address and telephone number listed below:

**District Health Department #10
385 Third Street
Manistee, MI 49660
231 723-3595**

CAS# : Chemical Abstract Service Registry Number	mg/L : milligrams / Liter (ppm)	Laboratory Contacts
MCL : Maximum Contaminant Level	ppm : parts per million	Drinking Water Unit Mgr: Julia Pieper
AL : Action Level	MPN : Most Probable Number	Systems Mgmt. Unit Mgr: George Krisztian
RL : Reporting Limit	CFU : Colony Forming Unit	

**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
DRINKING WATER LABORATORY**

USEPA Region V Drinking Water Cert. No. MI00003

P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-8184
FAX: (517) 335-8562

**Sample Number
LF72143**



Official Laboratory Report

Report To: BEAR LAKE VILLAGE
7780 LAKE ST
PO BOX 175
BEAR LAKE MI 49614

System Name/Owner:	BEAR LAKE VILLAGE	WSSN/Pool ID:	0510
Collection Address:	7828 LOCUST ST, BEAR LAKE	Source:	TYPE I
Collected By:	ALAN ANDERSON	Site Code:	
Township/Well#/Section:	BEAR LAKE//	Collector:	Private Citizen
County:	Manistee	Date Collected:	07/08/2015 08:00
Sample Point:		Date Received:	07/11/2015 11:33
Water System:	Treated Public Distribution System	Purpose:	Routine Monitoring

TESTING INFORMATION			REGULATORY INFORMATION			
Analyte Name	Result (mg/L)	Date Tested	RL (mg/L)	MCL/AL (mg/L)	Method	CAS #
Copper	0.86	07/15/2015	0.05	1.3	EPA 200.8	7440-50-8
Lead	0.024	07/15/2015	0.001	0.015	EPA 200.8	7439-92-1

The analyses performed by the MDEQ Drinking Water Laboratory were conducted using methods approved by the U.S. Environmental Protection Agency in accordance with the Safe Drinking Water Act, 40 CFR parts 141-143, and other regulatory agencies as appropriate.

Your local health department has detailed information about the quality of drinking water in your area. If you have concerns about the health risks related to the test results of your sample, please contact the Environmental Health Section through the address and telephone number listed below:

**District Health Department #10
385 Third Street
Manistee, MI 49660
231 723-3595**

*From
Jerrid DPW
Bair School Board*

CAS# : Chemical Abstract Service Registry Number	mg/L : milligrams / Liter (ppm)	Laboratory Contacts
MCL : Maximum Contaminant Level	ppm : parts per million	Drinking Water Unit Mgr: Julia Pieper
AL : Action Level	MPN : Most Probable Number	Systems Mgmt. Unit Mgr: George Krisztian
RL : Reporting Limit	CFU : Colony Forming Unit	

**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
DRINKING WATER LABORATORY**



USEPA Region V Drinking Water Cert. No. MI00003
P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-8184
FAX: (517) 335-8562

**Sample Number
LF72144**

Official Laboratory Report

Report To: BEAR LAKE VILLAGE
7780 LAKE ST
PO BOX 175
BEAR LAKE MI 49614

System Name/Owner:	BEAR LAKE VILLAGE	WSSN/Pool ID:	0510
Collection Address:	12051 WEST ST, BEAR LAKE	Source:	TYPE I
Collected By:	ED WALBURN	Site Code:	
Township/Well#/Section:	BEAR LAKE//	Collector:	Private Citizen
County:	Manistee	Date Collected:	07/08/2015 06:00
Sample Point:		Date Received:	07/11/2015 11:33
Water System:	Treated Public Distribution System	Purpose:	Routine Monitoring

TESTING INFORMATION			REGULATORY INFORMATION			
Analyte Name	Result (mg/L)	Date Tested	RL (mg/L)	MCL/AL (mg/L)	Method	CAS #
Copper	0.34	07/15/2015	0.05	1.3	EPA 200.8	7440-50-8
Lead	0.005	07/15/2015	0.001	0.015	EPA 200.8	7439-92-1

The analyses performed by the MDEQ Drinking Water Laboratory were conducted using methods approved by the U.S. Environmental Protection Agency in accordance with the Safe Drinking Water Act, 40 CFR parts 141-143, and other regulatory agencies as appropriate.

Your local health department has detailed information about the quality of drinking water in your area. If you have concerns about the health risks related to the test results of your sample, please contact the Environmental Health Section through the address and telephone number listed below:

**District Health Department #10
385 Third Street
Manistee, MI 49660
231 723-3595**

CAS# : Chemical Abstract Service Registry Number	mg/L : milligrams / Liter (ppm)	Laboratory Contacts
MCL : Maximum Contaminant Level	ppm : parts per million	Drinking Water Unit Mgr: Julia Pieper
AL : Action Level	MPN : Most Probable Number	Systems Mgmt. Unit Mgr: George Kriszian
RL : Reporting Limit	CFU : Colony Forming Unit	

LEAD & COPPER

WSSN: 00510

COUNTY: MANISTEE

**Drinking Water
Lead & Copper Report Form**



12/11/12
DWD

Please return completed form to the DEQ Water Bureau district office. Addresses on last page.

- 1. System Name: Bearlake Village
- 1a. County: Manistee 2. WSSN: 0510
- 3. Population: <500 4. Monitoring Period: From: 10-1-09 To: 9-30-12
- 5. Minimum # of Samples Required: 5 6. # of Samples Taken: 5
- 7. Name of Certified Laboratory: ~~Kent County Health Dept.~~ MDEQ

8. SAMPLE CRITERIA:

Yes	No		
<input checked="" type="checkbox"/>	<input type="checkbox"/>	a. Are the same sampling points used as in the previous monitoring period?	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. Are all samples from Tier 1 sites?	For more information see Instructions paragraph 10, subparagraph "Sample Category".
<input checked="" type="checkbox"/>	<input type="checkbox"/>	c. Are all samples from Tier 1, 2, or 3 sites giving Tier 1 priority?	
<input type="checkbox"/>	<input type="checkbox"/>	d. If no Tier 1, 2, or 3 sites are available, do all sites have plumbing materials commonly found at other locations in the water system?	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	e. Is the minimum number of lead service line samples taken (when applicable)?	

Comments:

9. SIGNATURE:

Signature: <u>[Handwritten Signature]</u>	Phone: <u>231 864 4300</u>
Title: <u>Maintenance Manager</u>	Date: <u>12-11-12</u>



Michigan Department of Environmental Quality

**Replicate Laboratory Report for
Lansing Drinking Water Laboratory**

Owner/Location Information:

BEAR LAKE VILLAGE
12036 LYNN ST
BEAR LAKE MI 49614

Sample Number: LLE44543

Sample/Collection Information:

WSSN: 00510
County: Manistee
Township: BEAR LAKE
Section:
Well #:
Collection Date: 8/22/2012 7:00:00 AM
Arrival Date: 8/25/2012 9:45:56 AM

Site Code:
Water Source: Public Community Water Supply
Sample Reason: Routine Monitoring
Sample Point: Treated Public Distribution System
Point Description:
Collector: Private Citizen
Collected By: CAROL URBANUS

<u>CasNo</u>	<u>Analyte</u>	<u>Result</u>	<u>Detect</u>	<u>Units</u>	<u>Method</u>
7440-50-8	COPPER (RECOVERABLE)	0.25 ✓	0.05	mg/L	EPA 200.8
7439-92-1	LEAD (TOTAL)	0.002 ✓	0.001	mg/L	EPA 200.8

Laboratory Comments:

By authority of PA 368 of 1978 as amended.

Print Date: Tue Dec 11 10:31:02 EST 2012

	Pb	Cu
	4	260
	3	250
	2	220
	2	120
	0	0
90%	3.5	255
Avg	2.2	170

In mem db
Send Report to Metrony 12/11



Michigan Department of Environmental Quality

**Replicate Laboratory Report for
Lansing Drinking Water Laboratory**

Owner/Location Information:

BEAR LAKE VILLAGE
12064 WISE ST
BEAR LAKE MI 49614

Sample Number: LLE44544

Sample/Collection Information:

WSSN: 00510
County: Manistee
Township: BEAR LAKE
Section:
Well #:
Collection Date: 8/23/2012 7:00:00 AM
Arrival Date: 8/25/2012 9:45:57 AM

Site Code:
Water Source: Public Community Water Supply
Sample Reason: Routine Monitoring
Sample Point: Treated Public Distribution System
Point Description:
Collector: Private Citizen
Collected By: DIANE WARE

<u>CasNo</u>	<u>Analyte</u>	<u>Result</u>	<u>Detect</u>	<u>Units</u>	<u>Method</u>
7440-50-8	COPPER (RECOVERABLE)	0.12	0.05	mg/L	EPA 200.8
7439-92-1	LEAD (TOTAL)	0.002	0.001	mg/L	EPA 200.8

Laboratory Comments:

By authority of PA 368 of 1978 as amended.

Print Date: Tue Dec 11 10:31:14 EST
2012



Michigan Department of Environmental Quality

Replicate Laboratory Report for Lansing Drinking Water Laboratory

Owner/Location Information:

BEAR LAKE VILLAGE
12459 RONNING ST
BEAR LAKE MI 49614

Sample Number: LLE44545

Sample/Collection Information:

WSSN: 00510
County: Manistee
Township: BEAR LAKE
Section:
Well #:
Collection Date: 8/22/2012 7:00:00 AM
Arrival Date: 8/25/2012 9:45:57 AM

Site Code:
Water Source: Public Community Water Supply
Sample Reason: Routine Monitoring
Sample Point: Treated Public Distribution System
Point Description:
Collector: Private Citizen
Collected By: RED RONNING

<u>CasNo</u>	<u>Analyte</u>	<u>Result</u>	<u>Detect</u>	<u>Units</u>	<u>Method</u>
7440-50-8	COPPER (RECOVERABLE)	ND ✓	0.05	mg/L	EPA 200.8
7439-92-1	LEAD (TOTAL)	ND ✓	0.001	mg/L	EPA 200.8

Laboratory Comments:

By authority of PA 368 of 1978 as amended.

Print Date: Tue Dec 11 10:31:20 EST
2012



Michigan Department of Environmental Quality

**Replicate Laboratory Report for
Lansing Drinking Water Laboratory**

Owner/Location Information:

BEAR LAKE VILLAGE
7828 LOCUST ST
BEAR LAKE MI 49614

Sample Number: LLE44546

Sample/Collection Information:

WSSN: 00510
County: Manistee
Township: BEAR LAKE
Section:
Well #:
Collection Date: 8/22/2012 7:00:00 AM
Arrival Date: 8/25/2012 9:45:57 AM

Site Code:
Water Source: Public Community Water Supply
Sample Reason: Routine Monitoring
Sample Point: Treated Public Distribution System
Point Description:
Collector: Private Citizen
Collected By: ALAN ANDERSON

<u>CasNo</u>	<u>Analyte</u>	<u>Result</u>	<u>Detect</u>	<u>Units</u>	<u>Method</u>
7440-50-8	COPPER (RECOVERABLE)	0.22 ✓	0.05	mg/L	EPA 200.8
7439-92-1	LEAD (TOTAL)	0.003 ✓	0.001	mg/L	EPA 200.8

Laboratory Comments:

By authority of PA 368 of 1978 as amended.

Print Date: Tue Dec 11 10:31:28 EST
2012



Michigan Department of Environmental Quality

**Replicate Laboratory Report for
Lansing Drinking Water Laboratory**

Owner/Location Information:

BEAR LAKE VILLAGE
12051 WEST ST
BEAR LAKE MI 49614

Sample Number: LLE44547

Sample/Collection Information:

WSSN: 00510
County: Manistee
Township: BEAR LAKE
Section:
Well #:
Collection Date: 8/22/2012 7:00:00 AM
Arrival Date: 8/25/2012 9:45:57 AM

Site Code:
Water Source: Public Community Water Supply
Sample Reason: Routine Monitoring
Sample Point: Treated Public Distribution System
Point Description:
Collector: Private Citizen
Collected By: ED WALBURN

<u>CasNo</u>	<u>Analyte</u>	<u>Result</u>	<u>Detect</u>	<u>Units</u>	<u>Method</u>
7440-50-8	COPPER (RECOVERABLE)	0.26 ✓	0.05	mg/L	EPA 200.8
7439-92-1	LEAD (TOTAL)	0.004 ✓	0.001	mg/L	EPA 200.8

Laboratory Comments:

By authority of PA 368 of 1978 as amended.

Print Date: Tue Dec 11 10:31:38 EST
2012



STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
CADILLAC DISTRICT OFFICE

Correspondence



STEVEN E. CHESTER
DIRECTOR

JENNIFER M. GRANHOLM
GOVERNOR

October 5, 2009

Mr. Gary McBride, Water Superintendent
Village of Bear Lake
P.O. Box 175
Bear Lake, Michigan 49614-0175

WSSN: 00510

Dear Mr. McBride:

SUBJECT: Village of Bear Lake 2009 Lead and Copper Report and Certification

This letter is to acknowledge receipt of the Village of Bear Lake lead and copper results for the monitoring period ending September 30, 2009.

Based on these results, no further action is required until the next round of monitoring which is from June 1, 2012 through September 30, 2012. You must collect a minimum number of five (5) samples during June, July, August or September of 2012.

Remember to use the previous sample sites whenever possible to maintain continuity in the sampling system. Samples shall be obtained from a cold-water kitchen tap or main bathroom sink tap.

Included is a Lead and Copper Monitoring Certificate for your records. There is no need to return a copy of this certificate.

If you have any questions, please contact me.

Sincerely,

Dave Maynard
Environmental Quality Analyst
Water Bureau
231-876-4481

Jim Bryson
SEE Program Scientist
Water Bureau
231-876-4479

Enclosure

cc w/enc: Mr. Glen Moore, Village President
District Health Dept. No. 10 (Manistee)

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

Water Bureau
120 West Chapin Street
Cadillac, Michigan 49601
231-775-3960

Date: 10/6/2009
Supply: Village of Bear Lake
WSSN: 05355
County: Manistee

LEAD AND COPPER MONITORING CERTIFICATE
for compliance with USEPA lead and copper regulations

RESULTS RECEIVED

Monitoring Period Ending: 09/30/2009
Round: I (ninth)
No. Samples Required: 5
No. Samples Collected: 5

RESULTS

Lead	90th percentile:	6	ppb
	Average:	3.4	ppb
	Maximum:	7	ppb
	Minimum:	1	ppb
	Number of samples above the action level:	0	
Copper	90th percentile:	0.290	ppm
	Average:	0.256	ppm
	Maximum:	0.310	ppm
	Minimum:	0.210	ppm
	Number of samples above the action level:	0	

The action levels are 15 ppb for lead and 1.300 ppm for copper. Your results are satisfactory.

NEXT MONITORING PERIOD

Monitoring Period Ending: 9/30/2012
Round: J (tenth)
No. Samples Required: 5 Collect in June, July, August or September of 2012.
Report Results By: 10/10/2012

Dave Maynard
Environmental Quality Analyst
231-876-4481
maynardd@michigan.gov

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

Water Bureau
 120 West Chapin Street
 Cadillac, Michigan 49601
 231-775-3960

Date: 10/5/2009
 Supply: Village of Bear Lake
 WSSN: 05355
 County: Manistee

LEAD AND COPPER MONITORING CERTIFICATE
 for compliance with USEPA lead and copper regulations

RESULTS RECEIVED

Monitoring Period Ending: 09/30/2009
 Round: I (ninth)
 No. Samples Required: 5
 No. Samples Collected: 5

RESULTS

Lead	90th percentile:	6	ppb
	Average:	3.4	ppb
	Maximum:	7	ppb
	Minimum:	1	ppb
	Number of samples above the action level:	0	
Copper	90th percentile:	0.290	ppm
	Average:	0.256	ppm
	Maximum:	0.310	ppm
	Minimum:	0.210	ppm
	Number of samples above the action level:	0	

The action levels are 15 ppb for lead and 1.300 ppm for copper. Your results are satisfactory.

NEXT MONITORING PERIOD

Monitoring Period Ending: 9/30/2012
 Round: J (tenth)
 No. Samples Required: 5 Collect in June, July, August or September of 2012.
 Report Results By: 10/10/2012

Dave Maynard
 Environmental Quality Analyst
 231-876-4481
maynardd@michigan.gov

Drinking Water Lead and Copper Report Form



Please return completed form to:
Michigan Department of Environmental Quality
Water Bureau
120 West Chapin St. Cadillac, MI 49601
Telephone: 231-775-3960
Fax: 231-775-1511

1. System Name: Bear Lake Village
- 1a. County: Manistee 2. WSSN: 0510
3. Population: <500 4. Monitoring Period: From: 10/1/06 To: 9/30/09
5. Minimum # of Samples Required: 5 6. # of Samples Taken: 5
7. Name of Certified Laboratory: MDEQ

8. SAMPLE CRITERIA:

Yes	No		
<input checked="" type="checkbox"/>	<input type="checkbox"/>	a. Are the same sampling points used as in the previous monitoring period?	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. Are all samples from Tier 1 sites?	For more information see <i>Instructions</i> paragraph 10, subparagraph "Sample Category".
<input checked="" type="checkbox"/>	<input type="checkbox"/>	c. Are all samples from Tier 1, 2, or 3 sites giving Tier 1 priority?	
<input type="checkbox"/>	<input type="checkbox"/>	d. If no Tier 1, 2, or 3 sites are available, do all sites have plumbing materials commonly found at other locations in the water system?	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	e. Is the minimum number of lead service line samples taken (when applicable)?	

RECEIVED

Comments:

OCT 2 2009

WB-CADILLAC

9. SIGNATURE: I hereby certify to the best of my knowledge, all tap samples were collected in the manner specified by EPA lead/copper regulations (i.e., one liter first draw samples following at least six hours of stagnation and that where necessary, proper instructions were given for homeowner collection).

Signature: <u>[Handwritten Signature]</u>	Telephone: <u>231 864 4300</u>
Title: <u>Village Maintenance Manager</u>	Date: <u>9/29/09</u>



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
DRINKING WATER LABORATORY

USEPA Region V Drinking Water Cert. No. MI00003
P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-8184
FAX: (517) 335-8562

Sample Number
LC89933

Official Laboratory Report

Report To: BEAR LAKE VILLAGE
PO BOX 175
BEAR LAKE MI 49614

System Name/Owner:	BEAR LAKE VILLAGE	WSSN/Pool ID:	0510
Collection Address:	12036 LYNN ST, BEAR LAKE	Source:	TYPE I
Collected By:	ELROY URBANUS	Site Code:	
Township/Well#/Section:	BEAR LAKE//	Collector:	Private Citizen
County:	Manistee	Date Collected:	08/11/2009 06:00
Sample Point:		Date Received:	08/12/2009 11:02
Water System:	Treated Public Distribution System	Purpose:	Routine Monitoring

TESTING INFORMATION			REGULATORY INFORMATION			
Analyte Name	Result (mg/L)	Date Tested	RL (mg/L)	MCL/AL (mg/L)	Method	CAS #
Copper	0.21	08/14/2009	0.05	1.3	EPA 200.8	7440-50-8
Lead	0.002	08/14/2009	0.001	0.015	EPA 200.8	7439-92-1

The analyses performed by the MDEQ Drinking Water Laboratory were conducted using methods approved by the U.S. Environmental Protection Agency in accordance with the Safe Drinking Water Act, 40 CFR parts 141-143, and other regulatory agencies as appropriate.

Your local health department has detailed information about the quality of drinking water in your area. If you have concerns about the health risks related to the test results of your sample, please contact the Environmental Health Section through the address and telephone number listed below:

District Health Department #10
385 Third Street
Manistee, MI 49660
231 723-3595

Pk	Cu
7	310
5	270
2	256
2	240
1	210
17	1280
3.4	256
7	310
1	210
6	290

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CAS# : Chemical Abstract Service Registry Number
MCL : Maximum Contaminant Level
AL : Action Level
RL : Reporting Limit

mg/L : milligrams / Liter (ppm)
ppm : parts per million
MPN : Most Probable Number
CFU : Colony Forming Unit

Laboratory Contacts
Drinking Water Unit Mgr: Julia Pieper
Systems Mgmt. Unit Mgr: George Krisztian



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
 DRINKING WATER LABORATORY

USEPA Region V Drinking Water Cert. No. MI00003
 P.O. Box 30270
 Lansing, MI 48909
 TEL: (517) 335-8184
 FAX: (517) 335-8562

Sample Number
 LC89934

Official Laboratory Report

Report To: BEAR LAKE VILLAGE
 PO BOX 175
 BEAR LAKE MI 49614

System Name/Owner:	BEAR LAKE VILLAGE	WSSN/Pool ID:	0510
Collection Address:	12064 WISE ST, BEAR LAKE	Source:	TYPE I
Collected By:	DIANNE WARE	Site Code:	
Township/Well#/Section:	BEAR LAKE//	Collector:	Private Citizen
County:	Manistee	Date Collected:	08/11/2009 06:00
Sample Point:		Date Received:	08/12/2009 11:02
Water System:	Treated Public Distribution System	Purpose:	Routine Monitoring

TESTING INFORMATION			REGULATORY INFORMATION			
Analyte Name	Result (mg/L)	Date Tested	RL (mg/L)	MCL/AL (mg/L)	Method	CAS #
Copper	0.27	08/14/2009	0.05	1.3	EPA 200.8	7440-50-8
Lead	0.002	08/14/2009	0.001	0.015	EPA 200.8	7439-92-1

The analyses performed by the MDEQ Drinking Water Laboratory were conducted using methods approved by the U.S. Environmental Protection Agency in accordance with the Safe Drinking Water Act, 40 CFR parts 141-143, and other regulatory agencies as appropriate.

Your local health department has detailed information about the quality of drinking water in your area. If you have concerns about the health risks related to the test results of your sample, please contact the Environmental Health Section through the address and telephone number listed below:

District Health Department #10
 385 Third Street
 Manistee, MI 49660
 231 723-3595

CAS# : Chemical Abstract Service Registry Number	mg/L : milligrams / Liter (ppm)	Laboratory Contacts
MCL : Maximum Contaminant Level	ppm : parts per million	Drinking Water Unit Mgr: Julia Pieper
AL : Action Level	MPN : Most Probable Number	Systems Mgmt. Unit Mgr: George Krisztian
RL : Reporting Limit	CFU : Colony Forming Unit	



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
 DRINKING WATER LABORATORY

USEPA Region V Drinking Water Cert. No. MI00003
 P.O. Box 30270
 Lansing, MI 48909
 TEL: (517) 335-8184
 FAX: (517) 335-8562

Sample Number
 LC89935

Official Laboratory Report

Report To: BEAR LAKE VILLAGE
 PO BOX 175
 BEAR LAKE MI 49614

System Name/Owner:	BEAR LAKE VILLAGE	WSSN/Pool ID:	0510
Collection Address:	7828 LOCUST ST, BEAR LAKE	Source:	TYPE I
Collected By:	ALAN ANDERSON	Site Code:	
Township/Well#/Section:	//	Collector:	Private Citizen
County:	Manistee	Date Collected:	08/11/2009 06:00
Sample Point:		Date Received:	08/12/2009 11:02
Water System:	Treated Public Distribution System	Purpose:	Routine Monitoring

TESTING INFORMATION			REGULATORY INFORMATION			
Analyte Name	Result (mg/L)	Date Tested	RL (mg/L)	MCL/AL (mg/L)	Method	CAS #
Copper	0.25	08/14/2009	0.05	1.3	EPA 200.8	7440-50-8
Lead	0.007	08/14/2009	0.001	0.015	EPA 200.8	7439-92-1

The analyses performed by the MDEQ Drinking Water Laboratory were conducted using methods approved by the U.S. Environmental Protection Agency in accordance with the Safe Drinking Water Act, 40 CFR parts 141-143, and other regulatory agencies as appropriate.

Your local health department has detailed information about the quality of drinking water in your area. If you have concerns about the health risks related to the test results of your sample, please contact the Environmental Health Section through the address and telephone number listed below:

District Health Department #10
 385 Third Street
 Manistee, MI 49660
 231 723-3595

CAS# : Chemical Abstract Service Registry Number	mg/L : milligrams / Liter (ppm)	Laboratory Contacts
MCL : Maximum Contaminant Level	ppm : parts per million	Drinking Water Unit Mgr: Julia Pieper
AL : Action Level	MPN : Most Probable Number	Systems Mgmt. Unit Mgr: George Krisztian
RL : Reporting Limit	CFU : Colony Forming Unit	



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
 DRINKING WATER LABORATORY

USEPA Region V Drinking Water Cert. No. MI00003
 P.O. Box 30270
 Lansing, MI 48909
 TEL: (517) 335-8184
 FAX: (517) 335-8562

Sample Number
 LC89936

Official Laboratory Report

Report To: BEAR LAKE VILLAGE
 PO BOX 175
 BEAR LAKE MI 49614

System Name/Owner:	BEAR LAKE VILLAGE	WSSN/Pool ID:	0510
Collection Address:	12051 WEST ST, BEAR LAKE	Source:	TYPE I
Collected By:	ED WALBURN	Site Code:	
Township/Well#/Section:	BEAR LAKE//	Collector:	Private Citizen
County:	Manistee	Date Collected:	08/11/2009 06:00
Sample Point:		Date Received:	08/12/2009 11:02
Water System:	Treated Public Distribution System	Purpose:	Routine Monitoring

TESTING INFORMATION			REGULATORY INFORMATION			
Analyte Name	Result (mg/L)	Date Tested	RL (mg/L)	MCL/AL (mg/L)	Method	CAS #
Copper	0.31	08/14/2009	0.05	1.3	EPA 200.8	7440-50-8
Lead	0.005	08/14/2009	0.001	0.015	EPA 200.8	7439-92-1

The analyses performed by the MDEQ Drinking Water Laboratory were conducted using methods approved by the U.S. Environmental Protection Agency in accordance with the Safe Drinking Water Act, 40 CFR parts 141-143, and other regulatory agencies as appropriate.

Your local health department has detailed information about the quality of drinking water in your area. If you have concerns about the health risks related to the test results of your sample, please contact the Environmental Health Section through the address and telephone number listed below:

District Health Department #10
 385 Third Street
 Manistee, MI 49660
 231 723-3595

CAS# : Chemical Abstract Service Registry Number	mg/L : milligrams / Liter (ppm)	Laboratory Contacts
MCL : Maximum Contaminant Level	ppm : parts per million	Drinking Water Unit Mgr: Julia Pieper
AL : Action Level	MPN : Most Probable Number	Systems Mgmt. Unit Mgr: George Krisztian
RL : Reporting Limit	CFU : Colony Forming Unit	



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
 DRINKING WATER LABORATORY

USEPA Region V Drinking Water Cert. No. MI00003
 P.O. Box 30270
 Lansing, MI 48909
 TEL: (517) 335-8184
 FAX: (517) 335-8562

Sample Number
 LC89937

Official Laboratory Report

Report To: BEAR LAKE VILLAGE
 PO BOX 175
 BEAR LAKE MI 49614

System Name/Owner:	BEAR LAKE VILLAGE	WSSN/Pool ID:	0510
Collection Address:	12459 RONNING ST, BEAR LAKE	Source:	TYPE I
Collected By:	RON RONNING	Site Code:	
Township/Well#/Section:	BEAR LAKE//	Collector:	Private Citizen
County:	Manistee	Date Collected:	08/11/2009 06:00
Sample Point:		Date Received:	08/12/2009 11:02
Water System:	Treated Public Distribution System	Purpose:	Routine Monitoring

TESTING INFORMATION			REGULATORY INFORMATION			
Analyte Name	Result (mg/L)	Date Tested	RL (mg/L)	MCL/AL (mg/L)	Method	CAS #
Copper	0.24	08/14/2009	0.05	1.3	EPA 200.8	7440-50-8
Lead	0.001	08/14/2009	0.001	0.015	EPA 200.8	7439-92-1

The analyses performed by the MDEQ Drinking Water Laboratory were conducted using methods approved by the U.S. Environmental Protection Agency in accordance with the Safe Drinking Water Act, 40 CFR parts 141-143, and other regulatory agencies as appropriate.

Your local health department has detailed information about the quality of drinking water in your area. If you have concerns about the health risks related to the test results of your sample, please contact the Environmental Health Section through the address and telephone number listed below:

District Health Department #10
 385 Third Street
 Manistee, MI 49660
 231 723-3595

CAS# : Chemical Abstract Service Registry Number	mg/L : milligrams / Liter (ppm)	Laboratory Contacts
MCL : Maximum Contaminant Level	ppm : parts per million	Drinking Water Unit Mgr: Julia Pieper
AL : Action Level	MPN : Most Probable Number	Systems Mgmt. Unit Mgr: George Krisztian
RL : Reporting Limit	CFU : Colony Forming Unit	

Drinking Water Lead & Copper Report Form



Please return completed form to the DEQ Water Bureau district office. Addresses on last page.

1. System Name: Bear Lake Village
- 1a. County: Manistee 2. WSSN: 0510
3. Population: <500 4. Monitoring Period: From: 10/1/03 To: 9/30/06
5. Minimum # of Samples Required: 5 6. # of Samples Taken: 5
7. Name of Certified Laboratory: MDEQ
8. SAMPLE CRITERIA:

Yes	No		
<input checked="" type="checkbox"/>	<input type="checkbox"/>	a. Are the same sampling points used as in the previous monitoring period?	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. Are all samples from Tier 1 sites?	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	c. Are all samples from Tier 1, 2, or 3 sites giving Tier 1 priority?	For more information see <i>Instructions</i> paragraph 10, subparagraph "Sample Category".
<input checked="" type="checkbox"/>	<input type="checkbox"/>	d. If no Tier 1, 2, or 3 sites are available, do all sites have plumbing materials commonly found at other locations in the water system?	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	e. Is the minimum number of lead service line samples taken (when applicable)?	

Comments:

9. SIGNATURE:

Signature: <u>[Handwritten Signature]</u>	Phone: <u>231 864 4300</u>
Title: <u>Maintenance Manager</u>	Date: <u>9/12/06</u>

SEP 13 2006

Updated 01/2006



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
 DRINKING WATER LABORATORY

USEPA Region V Drinking Water Cert. No. MI00003
 P.O. Box 30270
 Lansing, MI 48909
 TEL: (517) 335-8184
 FAX: (517) 335-8562

Sample Number
LB06405

Official Laboratory Report

Report To: HOWARD HIGLEY
 PO BOX 175
 BEAR LAKE MI 49614

System Name/Owner: BEAR LAKE VILLAGE
 Collection Address: 12051 WEST ST, BEAR LAKE
 Collected By: ED WALBURN
 Township/Well#/Section: BEAR LAKE//
 County: Manistee
 Sample Point:
 Water System: Treated Public Distribution System

HI

WSSN/Pool ID: 0510
 Source: TYPE I
 Site Code:
 Collector: Private Citizen
 Date Collected: 08/15/2006 08:00
 Date Received: 08/16/2006 11:06
 Purpose: Routine Monitoring

TESTING INFORMATION			REGULATORY INFORMATION			
Analyte Name	Result (mg/L)	Date Tested	RL (mg/L)	MCL/AL (mg/L)	Method	CAS #
Copper	0.30	08/21/2006	0.05	1.3	EPA 200.8	7440-50-8
Lead	0.005	08/21/2006	0.001	0.015	EPA 200.8	7439-92-1

The analyses performed by the MDEQ Drinking Water Laboratory were conducted using methods approved by the U.S. Environmental Protection Agency in accordance with the Safe Drinking Water Act, 40 CFR parts 141-143, and other regulatory agencies as appropriate.

Your local health department has detailed information about the quality of drinking water in your area. If you have concerns about the health risks related to the test results of your sample, please contact the Environmental Health Section through the address and telephone number listed below:

District Health Department #10
 385 Third Street
 Manistee, MI 49660
 231 723-3595

Pb	Cu
5	410
5	300
4	260
2	130
0	0
<hr/>	<hr/>
16	1100
Ave	220
max	410
min	0
90%tile	355

CAS# : Chemical Abstract Service Registry Number
 MCL : Maximum Contaminant Level
 AL : Action Level
 RL : Reporting Limit

mg/L : milligrams / Liter (ppm)
 ppm : parts per million
 MPN : Most Probable Number
 CFU : Colony Forming Unit

Laboratory Contacts
 Drinking Water Unit Mgr: Sandy Kerns
 Systems Mgmt. Unit Mgr: George Krisztian



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
 DRINKING WATER LABORATORY

USEPA Region V Drinking Water Cert. No. MI00003
 P.O. Box 30270
 Lansing, MI 48909
 TEL: (517) 335-8184
 FAX: (517) 335-8562

Sample Number
LB06406

Official Laboratory Report

Report To: HOWARD HIGLEY
 PO BOX 175
 BEAR LAKE MI 49614

System Name/Owner:	BEAR LAKE VILLAGE	WSSN/Pool ID:	0510
Collection Address:	12459 RONNING ST, BEAR LAKE	Source:	TYPE I
Collected By:	RED RONNING	Site Code:	
Township/Well#/Section:	BEAR LAKE//	Collector:	Private Citizen
County:	Manistee	Date Collected:	08/15/2006 08:00
Sample Point:		Date Received:	08/16/2006 11:06
Water System:	Treated Public Distribution System	Purpose:	Routine Monitoring

HZ

TESTING INFORMATION			REGULATORY INFORMATION			
Analyte Name	Result (mg/L)	Date Tested	RL (mg/L)	MCL/AL (mg/L)	Method	CAS #
Copper	Not detected	08/21/2006	0.05	1.3	EPA 200.8	7440-50-8
Lead	Not detected	08/21/2006	0.001	0.015	EPA 200.8	7439-92-1

The analyses performed by the MDEQ Drinking Water Laboratory were conducted using methods approved by the U.S. Environmental Protection Agency in accordance with the Safe Drinking Water Act, 40 CFR parts 141-143, and other regulatory agencies as appropriate.

Your local health department has detailed information about the quality of drinking water in your area. If you have concerns about the health risks related to the test results of your sample, please contact the Environmental Health Section through the address and telephone number listed below:

District Health Department #10
 385 Third Street
 Manistee, MI 49660
 231 723-3595

CAS# : Chemical Abstract Service Registry Number	mg/L : milligrams / Liter (ppm)	Laboratory Contacts
MCL : Maximum Contaminant Level	ppm : parts per million	Drinking Water Unit Mgr: Sandy Kerns
AL : Action Level	MPN : Most Probable Number	Systems Mgmt. Unit Mgr: George Krisztian
RL : Reporting Limit	CFU : Colony Forming Unit	



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
 DRINKING WATER LABORATORY

USEPA Region V Drinking Water Cert. No. MI00003
 P.O. Box 30270
 Lansing, MI 48909
 TEL: (517) 335-8184
 FAX: (517) 335-8562

Sample Number
LB06407

Official Laboratory Report

Report To: HOWARD HIGLEY
 PO BOX 175
 BEAR LAKE MI 49614

H-5

System Name/Owner:	BEAR LAKE VILLAGE	WSSN/Pool ID:	0510
Collection Address:	12036 LYNN ST, BEAR LAKE	Source:	TYPE I
Collected By:	ELROY URBANUS	Site Code:	
Township/Well#/Section:	BEAR LAKE//	Collector:	Private Citizen
County:	Manistee	Date Collected:	08/15/2006 08:00
Sample Point:		Date Received:	08/16/2006 11:06
Water System:	Treated Public Distribution System	Purpose:	Routine Monitoring

TESTING INFORMATION			REGULATORY INFORMATION			
Analyte Name	Result (mg/L)	Date Tested	RL (mg/L)	MCL/AL (mg/L)	Method	CAS #
Copper	0.41	08/21/2006	0.05	1.3	EPA 200.8	7440-50-8
Lead	0.002	08/21/2006	0.001	0.015	EPA 200.8	7439-92-1

The analyses performed by the MDEQ Drinking Water Laboratory were conducted using methods approved by the U.S. Environmental Protection Agency in accordance with the Safe Drinking Water Act, 40 CFR parts 141-143, and other regulatory agencies as appropriate.

Your local health department has detailed information about the quality of drinking water in your area. If you have concerns about the health risks related to the test results of your sample, please contact the Environmental Health Section through the address and telephone number listed below:

District Health Department #10
 385 Third Street
 Manistee, MI 49660
 231 723-3595

CAS# : Chemical Abstract Service Registry Number
 MCL : Maximum Contaminant Level
 AL : Action Level
 RL : Reporting Limit

mg/L : milligrams / Liter (ppm)
 ppm : parts per million
 MPN : Most Probable Number
 CFU : Colony Forming Unit

Laboratory Contacts
 Drinking Water Unit Mgr: Sandy Kerns
 Systems Mgmt. Unit Mgr: George Krisztian



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
 DRINKING WATER LABORATORY

USEPA Region V Drinking Water Cert. No. MI00003
 P.O. Box 30270
 Lansing, MI 48909
 TEL: (517) 335-8184
 FAX: (517) 335-8562

Sample Number
LB06408

Official Laboratory Report

Report To: HOWARD HIGLEY
 PO BOX 175
 BEAR LAKE MI 49614

System Name/Owner:	BEAR LAKE VILLAGE	WSSN/Pool ID:	0510
Collection Address:	7828 LOCUST ST, BEAR LAKE	Source:	TYPE I
Collected By:	ALAN ANDERSON	Site Code:	
Township/Well#/Section:	BEAR LAKE//	Collector:	Private Citizen
County:	Manistee	Date Collected:	08/15/2006 08:00
Sample Point:		Date Received:	08/16/2006 11:06
Water System:	Treated Public Distribution System	Purpose:	Routine Monitoring

TESTING INFORMATION			REGULATORY INFORMATION			
Analyte Name	Result (mg/L)	Date Tested	RL (mg/L)	MCL/AL (mg/L)	Method	CAS #
Copper	0.26	08/21/2006	0.05	1.3	EPA 200.8	7440-50-8
Lead	0.005	08/21/2006	0.001	0.015	EPA 200.8	7439-92-1

The analyses performed by the MDEQ Drinking Water Laboratory were conducted using methods approved by the U.S. Environmental Protection Agency in accordance with the Safe Drinking Water Act, 40 CFR parts 141-143, and other regulatory agencies as appropriate.

Your local health department has detailed information about the quality of drinking water in your area. If you have concerns about the health risks related to the test results of your sample, please contact the Environmental Health Section through the address and telephone number listed below:

District Health Department #10
 385 Third Street
 Manistee, MI 49660
 231 723-3595

CAS# : Chemical Abstract Service Registry Number	mg/L : milligrams / Liter (ppm)	Laboratory Contacts
MCL : Maximum Contaminant Level	ppm : parts per million	Drinking Water Unit Mgr: Sandy Kerns
AL : Action Level	MPN : Most Probable Number	Systems Mgmt. Unit Mgr: George Krisztian
RL : Reporting Limit	CFU : Colony Forming Unit	



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
 DRINKING WATER LABORATORY

USEPA Region V Drinking Water Cert. No. MI00003
 P.O. Box 30270
 Lansing, MI 48909
 TEL: (517) 335-8184
 FAX: (517) 335-8562

Sample Number
 LB06409

Official Laboratory Report

Report To: HOWARD HIGLEY
 PO BOX 175
 BEAR LAKE MI 49614

System Name/Owner: BEAR LAKE VILLAGE
 Collection Address: 12064 WISE ST, BEAR LAKE
 Collected By: BURTON WARE
 Township/Well#/Section: BEAR LAKE//
 County: Manistee
 Sample Point:
 Water System: Treated Public Distribution System

Hg

WSSN/Pool ID: 0510
 Source: TYPE I
 Site Code:
 Collector: Private Citizen
 Date Collected: 08/15/2006 08:00
 Date Received: 08/16/2006 11:06
 Purpose: Routine Monitoring

TESTING INFORMATION			REGULATORY INFORMATION			
Analyte Name	Result (mg/L)	Date Tested	RL (mg/L)	MCL/AL (mg/L)	Method	CAS #
Copper	0.13	08/21/2006	0.05	1.3	EPA 200.8	7440-50-8
Lead	0.004	08/21/2006	0.001	0.015	EPA 200.8	7439-92-1

The analyses performed by the MDEQ Drinking Water Laboratory were conducted using methods approved by the U.S. Environmental Protection Agency in accordance with the Safe Drinking Water Act, 40 CFR parts 141-143, and other regulatory agencies as appropriate.

Your local health department has detailed information about the quality of drinking water in your area. If you have concerns about the health risks related to the test results of your sample, please contact the Environmental Health Section through the address and telephone number listed below:

District Health Department #10
 385 Third Street
 Manistee, MI 49660
 231 723-3595

CAS# : Chemical Abstract Service Registry Number	mg/L : milligrams / Liter (ppm)	Laboratory Contacts
MCL : Maximum Contaminant Level	ppm : parts per million	Drinking Water Unit Mgr: Sandy Kerns
AL : Action Level	MPN : Most Probable Number	Systems Mgmt. Unit Mgr: George Krisztian
RL : Reporting Limit	CFU : Colony Forming Unit	

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

Water Bureau
120 West Chapin Street
Cadillac, Michigan 49601
231-775-3960

Date: 9/14/2006
Supply: Village Of Bear Lake
WSSN: 00510
County: Manistee

LEAD AND COPPER MONITORING CERTIFICATE
for compliance with USEPA lead and copper regulations

RESULTS RECEIVED

Monitoring Period Ending: 09/30/2006
Round: H (eighth)
No. Samples Required: 5
No. Samples Collected: 5

RESULTS

Lead	90th percentile:	5	ppb
	Average:	3.2	ppb
	Maximum:	5	ppb
	Minimum:	0	ppb
	Number of samples above the action level:	0	
Copper	90th percentile:	0.355	ppm
	Average:	0.220	ppm
	Maximum:	0.410	ppm
	Minimum:	0	ppm
	Number of samples above the action level:	0	

The action levels are 15 ppb for lead and 1.300 ppm for copper. Your results are satisfactory.

NEXT MONITORING PERIOD

Monitoring Period Ending: 9/30/2009
Round: I (ninth)
No. Samples Required: 5 Collect in June, July, August, or September of one calendar year.
Report Results By: 10/10/2009

Dave Maynard, Environmental Quality Analyst
231-775-3960, Extension 6393
maynardd@michigan.gov

LEAD/COPPER REPORTING

(Handwritten initials)

1. SYSTEM NAME: Bear Lake Village

2. WSSN: 0510

3. POPULATION: 2500

4. MONITORING PERIOD: FROM 10/1/00 TO 9/30/03 ROUND 7

5. NO. OF SAMPLES REQUIRED: 5

6. No. SAMPLES TAKEN: 5

7. NAME OF CERTIFIED LABORATORY: MDEQ

8. SAMPLE CRITERIA:

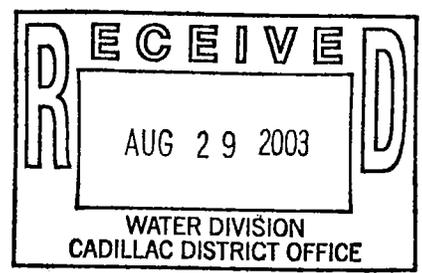
a. Tier 2 or 3 sites used? Yes No: (if yes, explain below)

b. Same sampling points used as in previous monitoring period (for 2nd and all subsequent monitoring periods)? Yes No: (if no, explain below)

c. Minimum required number of lead service line samples taken (when applicable)? NA
Yes No: (if no, explain below)

Explanations:

No tier 1 sites in system



9. CERTIFICATION:

I hereby certify that to the best of my knowledge, all tap samples were collected in the manner specified by EPA lead/copper regulations (i.e., one liter first draw samples following at least six hours of stagnation and that where necessary, proper instructions were given for homeowner collection).

Signature: [Handwritten Signature]

Title: Maintenance Manager

Date: 8/27/03

Michigan Department of Environmental Quality

DWRP Laboratory Services - Drinking Water Lab
 USEPA Region V Drinking Water Lab Cert. No. MI00003
 P.O. Box 30270, Lansing, MI 48909-7770

TEL: 517/335-8184 FAX: 517/335-8562

Official Laboratory Report

Report To:

Bear Lake Village
 PO Box 175
 Bear Lake MI 49614

Sample Number: C2003039556
 Customer Number: 02452100

System Name/Owner: Bear Lake Village

WSSN / Pool ID: 0510

Collection Address: 12064 Wise Street, Bear Lake 49614

Source: Type I

Collected By: WARE

Site Code:

Twp/Sec/Well #: Bear Lake/ ? / ?

Collector: Private Citizen

County: Manistee

Sample Date: 8/5/2003 8:00:00AM

Sample Point:

Received: 8/6/2003 10:03:00AM

Sample Kit #: 36CC

Purpose: Routine Monitoring

Chlorination: Yes

Water System: Treated Public Distribution

Test Result	Analyte Name	Tested	Limit MCL	Rpt Limit	Test Performed
0.31 mg/L	COPPER	8/8/2003		0.05 mg/L	CMCU 20000104
0.002 mg/L	LEAD BY ICP/MS	8/8/2003		0.001 mg/L	CPB 19991210

Lab Comments:

None

Pb
 5- 9
 4- 5
 3- 2
 2- 2
 1- 2/20

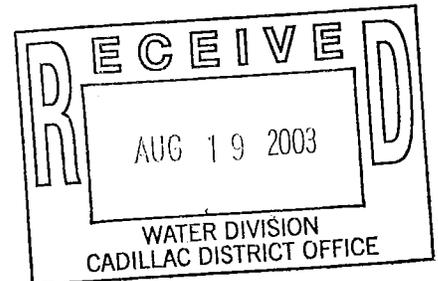
9
 2
 2
 2

Cu
 5- 530
 4- 440
 3- 350
 2- 310
 1- 210
 1840

440
 310
 350
 210

Pb = 7
 Pb avg = 4

Cu 90 = 485
 Cu avg = 360



Michigan Department of Environmental Quality

DWRP Laboratory Services - Drinking Water Lab
USEPA Region V Drinking Water Lab Cert. No. MI00003
P.O. Box 30270, Lansing, MI 48909-7770

TEL: 517/335-8184 FAX: 517/335-8562

Official Laboratory Report

Report To:

Bear Lake Village
PO Box 175
Bear Lake MI 49614

Sample Number: C2003039557
Customer Number: 02452100

System Name/Owner: BEAR LAKE VILLAGE

WSSN / Pool ID: 0510

Collection Address: 12459 Ronning Street, Bear Lake 49614

Source: Type I

Collected By: RONNING

Site Code:

Twp/Sec/Well #: Bear Lake/ ? / ?

Collector: Private Citizen

County: Manistee

Sample Date: 8/5/2003 8:00:00AM

Sample Point:

Received: 8/6/2003 10:03:00AM

Sample Kit #: 36CC

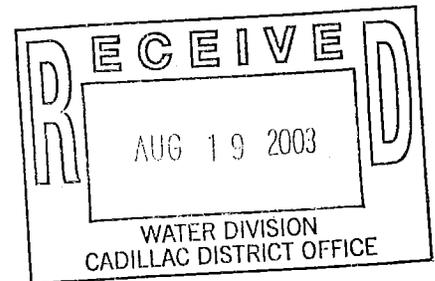
Purpose: Routine Monitoring

Chlorination: Yes

Water System: Treated Public Distribution

Test Result	Analyte Name	Tested	Limit MCL	Rpt Limit	Test Performed
0.21 mg/L	COPPER	8/8/2003		0.05 mg/L	CMCU 20000104
0.002 mg/L	LEAD BY ICP/MS	8/8/2003		0.001 mg/L	CPB 19991210

Lab Comments:
None



Michigan Department of Environmental Quality

DWRP Laboratory Services - Drinking Water Lab
USEPA Region V Drinking Water Lab Cert. No. MI00003
P.O. Box 30270, Lansing, MI 48909-7770

TEL: 517/335-8184 FAX: 517/335-8562

Official Laboratory Report

Report To:

Bear Lake Village
PO Box 175
Bear Lake MI 49614

Sample Number: C2003039558
Customer Number: 02452100

System Name/Owner: Bear Lake Village

WSSN / Pool ID: 0510

Collection Address: 7828 Locust Street, Bear Lake 49614

Source: Type I

Collected By: ANDERSON

Site Code:

Twp/Sec/Well #: Bear Lake/ ? / ?

Collector: Private Citizen

County: Menominee

Sample Date: 8/5/2003 8:00:00AM

Sample Point:

Received: 8/6/2003 10:03:00AM

Sample Kit #: 36CC

Purpose: Routine Monitoring

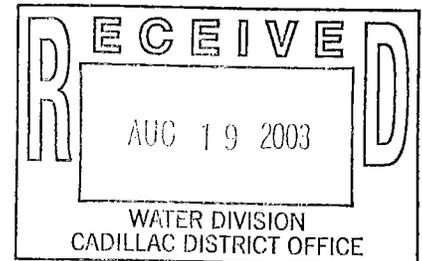
Chlorination: Yes

Water System: Treated Public Distribution

Test Result	Analyte Name	Tested	Limit MCL	Rpt Limit	Test Performed
0.44 mg/L	COPPER	8/8/2003		0.05 mg/L	CMCU 20000104
0.009 mg/L	LEAD BY ICP/MS	8/8/2003		0.001 mg/L	CPB 19991210

Lab Comments:

None



Michigan Department of Environmental Quality

DWRP Laboratory Services - Drinking Water Lab
USEPA Region V Drinking Water Lab Cert. No. MI00003
P.O. Box 30270, Lansing, MI 48909-7770

TEL: 517/335-8184 FAX: 517/335-8562

Official Laboratory Report

Report To:

Bear Lake Village
PO Box 175
Bear Lake MI 49614

Sample Number: C2003039559
Customer Number: 02452100

System Name/Owner: Bear Lake Village

WSSN / Pool ID: 0510

Collection Address: 12036 Lynn Street, Bear Lake 49614

Source: Type I

Collected By:

Site Code:

Twp/Sec/Well #: Bear Lake/ ? / ?

Collector: Public Water Supply Operator

County: Manistee

Sample Date: 8/5/2003 8:00:00AM

Sample Point:

Received: 8/6/2003 10:03:00AM

Sample Kit #: 36CC

Purpose: Routine Monitoring

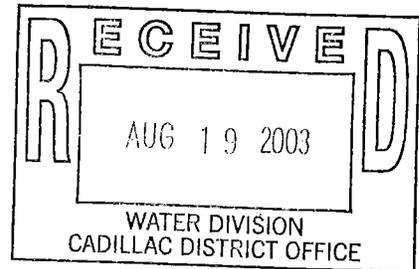
Chlorination: Yes

Water System: Treated Public Distribution

Test Result	Analyte Name	Tested	Limit MCL	Rpt Limit	Test Performed
0.35 mg/L	COPPER	8/8/2003		0.05 mg/L	CMCU 20000104
0.002 mg/L	LEAD BY ICP/MS	8/8/2003		0.001 mg/L	CPB 19991210

Lab Comments:

None



Michigan Department of Environmental Quality

DWRP Laboratory Services - Drinking Water Lab
USEPA Region V Drinking Water Lab Cert. No. MI00003
P.O. Box 30270, Lansing, MI 48909-7770

TEL: 517/335-8184 FAX: 517/335-8562

Official Laboratory Report

Report To:

Bear Lake Village
PO Box 175
Bear Lake MI 49614

Sample Number: C2003039558
Customer Number: 02452100

System Name/Owner: Bear Lake Village

WSSN / Pool ID: 0510

Collection Address: 7828 Locust Street, Bear Lake 49614

Source: Type I

Collected By: ANDERSON

Site Code:

Twp/Sec/Well #: Bear Lake/???

Collector: Private Citizen

County: Manistee

Sample Date: 8/5/2003 8:00:00AM

Sample Point:

Received: 8/6/2003 10:03:00AM

Sample Kit #: 36CC

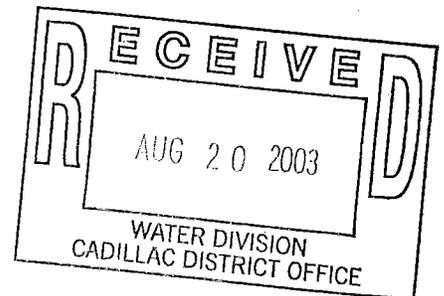
Purpose: Routine Monitoring

Chlorination: Yes

Water System: Treated Public Distribution

Test Result	Analyte Name	Tested	Limit MCL	Rpt Limit	Test Performed	
0.44 mg/L	COPPER	8/8/2003		0.05 mg/L	CMCU	20000104
0.009 mg/L	LEAD BY ICP/MS	8/8/2003		0.001 mg/L	CPB	19991210

Lab Comments:
None



Michigan Department of Environmental Quality

DWRP Laboratory Services - Drinking Water Lab
USEPA Region V Drinking Water Lab Cert. No. MI00003
P.O. Box 30270, Lansing, MI 48909-7770

TEL: 517/335-8184 FAX: 517/335-8562

Official Laboratory Report

Report To:

Village of Bear Lake
PO Box 175
Bear Lake MI 49614

Sample Number: C2003040272
Customer Number: 77714000

System Name/Owner: Village of Bear Lake

WSSN / Pool ID: 0510

Collection Address: 12051 West Street, Bear Lake 49614

Source: Type I

Collected By: ED WALBURN

Site Code:

Twp/Sec/Well #: Bear Lake/ ? / ?

Collector: Private Citizen

County: Manistee

Sample Date: 8/7/2003 8:00:00AM

Sample Point:

Received: 8/8/2003 1:30:00PM

Sample Kit #: 36CC

Purpose: Routine Monitoring

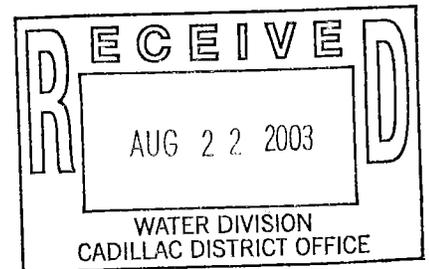
Chlorination: Yes

Water System: Treated Public Distribution

Test Result	Analyte Name	Tested	Limit MCL	Rpt Limit	Test Performed
0.53 mg/L	COPPER	8/12/2003		0.05 mg/L	CMCU 20000104
0.005 mg/L	LEAD BY ICP/MS	8/12/2003		0.001 mg/L	CPB 19991210

Lab Comments:

None



Lead and Copper Monitoring History

MonPrdEnd	Round	#Coll	#Req	DateColl	DateCert	Pb90	PbAve	PbMax	#>PbAL	Cu90	CuAve	CuMax	#>CuAL	Comments
00510 Village of Bear Lake														
09/30/2003	3 yr	5	5	08/05/2003	08/29/2003	7	4	9	0	485	368	530	0	
09/30/2000	3 yr	5				11	6	13		650	500	680		
09/30/1997	1 yr	5				4.5	1.8	9		525	282	630		
06/30/1996	1 yr	5				0	0	0		445	316	550		
06/30/1995	1 yr	5				4	2.2	5		665	484	730		
06/30/1994	6 mo	10				15	9.3	52		1260	856	3920		
12/31/1993	6 mo	10				9	8	39		1060	731	1960		

Wednesday, September 10, 2003

J:\FOS\Databases\Monitoring Databases\Chemistry .Contact Information

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

Drinking Water and Radiological Protection Division
120 West Chapin Street
Cadillac, Michigan 49601

FILE COPY

Mr. Gary McBride, Water Superintendent
Village of Bear Lake
7625 Lake Street
P.O. Box 175
Bear Lake, MI 49614-0175

Date: 3/5/01
Supply: Bear Lake
WSSN: 00510

LEAD AND COPPER MONITORING

for compliance with USEPA lead and copper regulations

RESULTS RECEIVED

Monitoring Period: From: **10/1/97** To: **9/30/00** Round: **6**

No. Samples Required: **5** No. Samples Collected: **5**

RESULTS

Lead	90th percentile:	11 ppb
	Average:	6 ppb
	Maximum:	13 ppb
	Minimum:	0 ppb
	Number of samples above the action level:	0
Copper	90th percentile:	650 ppb
	Average:	500 ppb
	Maximum:	680 ppb
	Minimum:	27 ppb
	Number of samples above the action level:	0

The action levels are 15 ppb for lead and 1300 ppb for copper. Your results are satisfactory

NEXT MONITORING PERIOD

Monitoring Period: From: **10/1/00** To: **9/30/03** Round: **7**

No. Samples Required: **5**

Note: Monitoring must be done during June, July, August, or September of one calendar year. It is recommended that sampling be completed the year before the end of the monitoring period.

Report Results By: **10/10/03**

Dave Maynard, Resource Analyst 
231-775-3960 ext. 6393
maynardd@state.mi.us

cc: District Health Dept. No. 10 (Manistee)

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

Drinking Water and Radiological Protection Division
120 West Chapin Street
Cadillac, Michigan 49601

Mr. Gary McBride, Water Superintendent
Village of Bear Lake
7625 Lake Street
P.O. Box 175
Bear Lake, MI 49614-0175

Date: 3/5/01
Supply: Bear Lake
WSSN: 00510

LEAD AND COPPER MONITORING

for compliance with USEPA lead and copper regulations

RESULTS RECEIVED

Monitoring Period: From: **10/1/97** To: **9/30/00** Round: **6**

No. Samples Required: **5** No. Samples Collected: **5**

RESULTS

Lead	90th percentile:	11 ppb
	Average:	6 ppb
	Maximum:	13 ppb
	Minimum:	0 ppb
Number of samples above the action level:		0
Copper	90th percentile:	650 ppb
	Average:	500 ppb
	Maximum:	680 ppb
	Minimum:	27 ppb
Number of samples above the action level:		0

The action levels are 15 ppb for lead and 1300 ppb for copper. Your results are satisfactory

NEXT MONITORING PERIOD

Monitoring Period: From: **10/1/00** To: **9/30/03** Round: **7**

No. Samples Required: **5**

Note: Monitoring must be done during June, July, August, or September of one calendar year
It is recommended that sampling be completed the year before the end of the monitoring period.

Report Results By: **10/10/03**

Dave Maynard, Resource Analyst 
231-775-3960 ext. 6393
maynardd@state.mi.us

cc: District Health Dept. No. 10 (Manistee)

Routine Lead and Copper Monitorin

00510	Bear Lake	Manistee	AA	[Printer Icon]	[Refresh Icon]
73	350	Wells			

Corrosion Control Treatment Info	Public Education Information	Source Water Monitoring Info
-------------------------------------	---------------------------------	---------------------------------

ROUTINE LEAD/COPPER SAMPLING DATA

Monitoring Period End Date	12/31/93	Lead 90th	9	<input type="checkbox"/>	Copper 90th	1060	<input type="checkbox"/>
Sampling Certification Form Status	C	Lead Average	8		Copper Average	731	
Required Sampling Status	C	Lead Maximum	39		Copper Maximum	1960	
Number of Samples Collected	10	Lead Minimum	0		Copper Minimum	100	
Sampling Frequency (months)	6						
POE WQ Monitoring Status	NR	Public Notification Status	NR		Comment <div style="border: 1px solid black; width: 100%; height: 100%;"></div>		
Number POE WQ Samples Required	0	Special Enforcement Status	NR				
POE WQ Monitoring Frequency	0	Date Enforcement Action Taken					
Dist WQ Monitoring Status	NR	Status of Public Education	NR				
Number Dist WQ Samples Required	0	Status of Public Ed Annual Letter	NR				
Dist WQ Monitoring Frequency	0						
					WSSN	00510	

Monitoring Period End Date	6/30/94	Lead 90th	15	<input type="checkbox"/>	Copper 90th	1260	<input type="checkbox"/>
Sampling Certification Form Status	C	Lead Average	9.3		Copper Average	856	
Required Sampling Status	C	Lead Maximum	52		Copper Maximum	3920	
Number of Samples Collected	10	Lead Minimum	0		Copper Minimum	130	
Sampling Frequency (months)	6						
POE WQ Monitoring Status	NR	Public Notification Status	NR		Comment <div style="border: 1px solid black; width: 100%; height: 100%;"></div>		
Number POE WQ Samples Required	0	Special Enforcement Status	NR				
POE WQ Monitoring Frequency	0	Date Enforcement Action Taken					
Dist WQ Monitoring Status	NR	Status of Public Education	NR				
Number Dist WQ Samples Required	0	Status of Public Ed Annual Letter	NR				
Dist WQ Monitoring Frequency	0						
					WSSN	00510	

Monitoring Period End Date	6/30/95	Lead 90th	4	<input type="checkbox"/>	Copper 90th	665	<input type="checkbox"/>
Sampling Certification Form Status	C	Lead Average	2.2		Copper Average	484	
Required Sampling Status	C	Lead Maximum	5		Copper Maximum	730	
Number of Samples Collected	5	Lead Minimum	0		Copper Minimum	250	

Sampling Frequency (months)	12			Comment
POE WQ Monitoring Status	NR	Public Notification Status	NR	
Number POE WQ Samples Required	0	Special Enforcement Status	NR	
POE WQ Monitoring Frequency	0	Date Enforcement Action Taken		
Dist WQ Monitoring Status	NR	Status of Public Education	NR	
Number Dist WQ Samples Required	0	Status of Public Ed Annual Letter	NR	
Dist WQ Monitoring Frequency	0			
				WSSN 00510

Monitoring Period End Date	6/30/96	Lead 90th	0	<input type="checkbox"/>	Copper 90th	445	<input type="checkbox"/>
Sampling Certification Form Status	C	Lead Average	0		Copper Average	316	
Required Sampling Status	C	Lead Maximum	0		Copper Maximum	550	
Number of Samples Collected	5	Lead Minimum	0		Copper Minimum	150	
Sampling Frequency (months)	12						

				Comment
POE WQ Monitoring Status	NR	Public Notification Status	NR	
Number POE WQ Samples Required	0	Special Enforcement Status	NR	
POE WQ Monitoring Frequency	0	Date Enforcement Action Taken		
Dist WQ Monitoring Status	NR	Status of Public Education	NR	
Number Dist WQ Samples Required	0	Status of Public Ed Annual Letter	NR	
Dist WQ Monitoring Frequency	0			
				WSSN 00510

Monitoring Period End Date	9/30/97	Lead 90th	4.5	<input type="checkbox"/>	Copper 90th	525	<input type="checkbox"/>
Sampling Certification Form Status	C	Lead Average	1.8		Copper Average	282	
Required Sampling Status	C	Lead Maximum	9		Copper Maximum	630	
Number of Samples Collected	5	Lead Minimum	0		Copper Minimum	80	
Sampling Frequency (months)	12						

				Comment
POE WQ Monitoring Status	NR	Public Notification Status	NR	
Number POE WQ Samples Required	0	Special Enforcement Status	NR	
POE WQ Monitoring Frequency	0	Date Enforcement Action Taken		
Dist WQ Monitoring Status	NR	Status of Public Education	NR	
Number Dist WQ Samples Required	0	Status of Public Ed Annual Letter	NR	
Dist WQ Monitoring Frequency	0			
				WSSN 00510

Monitoring Period End Date	9/30/00	Lead 90th	11	<input type="checkbox"/>	Copper 90th	650	<input type="checkbox"/>
Sampling Certification Form Status	C	Lead Average	6		Copper Average	500	
Required Sampling Status	C	Lead Maximum	13		Copper Maximum	680	
Number of Samples Collected	5	Lead Minimum	0		Copper Minimum	27	

Sampling Frequency (months)

36

Comment

POE WQ Monitoring Status

NR

Public Notification Status

NR

Number POE WQ Samples Required

0

Special Enforcement Status

NR

POE WQ Monitoring Frequency

Date Enforcement Action Taken

Dist WQ Monitoring Status

NR

Status of Public Education

NR

Number Dist WQ Samples Required

0

Status of Public Ed Annual Letter

NR

Dist WQ Monitoring Frequency

WSSN 00510

LEAD/COPPER REPORTING

(Handwritten initials)

1. SYSTEM NAME: Bear Lake Village

2. WSSN: OS10 MANISTEE CO

3. POPULATION: < 500

4. MONITORING PERIOD: FROM 10/1/97 TO 9/30/00 ROUND 6

5. NO. OF SAMPLES REQUIRED: 5 6. No. SAMPLES TAKEN: 5

7. NAME OF CERTIFIED LABORATORY: DEQ Drinking Water Lab

8. SAMPLE CRITERIA:

a. Tier 2 or 3 sites used? Yes: No: (if yes, explain below)

b. Same sampling points used as in previous monitoring period (for 2nd and all subsequent monitoring periods)? Yes: No: (if no, explain below)

c. Minimum required number of lead service line samples taken (when applicable)? NA

Yes: No: (if no, explain below)

Explanations:

- A) No tier 1 sites in system
- B) 7659 main St. changed hands so we replaced them with 12068 wise St.

9. CERTIFICATION:

I hereby certify that to the best of my knowledge, all tap samples were collected in the manner specified by EPA lead/copper regulations (i.e., one liter first draw samples following at least six hours of stagnation and that where necessary, proper instructions were given for homeowner collection).

Signature: *(Handwritten Signature)*

Title: *(Handwritten Title)*

Date: 3/15/01

RECEIVED
MICH. DEPT. OF ENVIRONMENTAL QUALITY

MAR 16 2001

Michigan Department of Environmental Quality

DWRP Laboratory Services - Drinking Water Lab
 USEPA Region V Drinking Water Lab Cert. No. MI00003
 P.O. Box 30270, Lansing, MI 48909-7770

TEL: 517/335-8184 FAX: 517/335-8562



Official Laboratory Report

Report To:

Howard Higley
 PO Box 175
 Bear Lake MI 49614

Sample Number: C2000041794
 Customer Number: 02452100

System Name/Owner: BEAR LAKE VILLAGE

WSSN / Pool ID: 0510

Collection Address: 12459 Ronning Street, Bear Lake 49614

Source: Type I

Collected By: RED BONNING

Site Code:

Twp/Sec/Well #: Bear Lake/ ? / ?

Collector: Private Citizen

County: Manistee

Sample Date: 08/10/2000 12:00:00AM

Sample Point:

Received: 08/14/2000 8:27:00AM

Sample Kit #: 30

Purpose: Routine Monitoring

Chlorination: Yes

Water System: Treated Public Distribution

Test Result	Analyte Name	Tested	Limit MCL	Rpt Limit	Test Performed
0.62 mg/L	COPPER	08/15/2000		0.05 mg/L	CMCU 20000104
0.013 mg/L	LEAD BY ICP/MS	08/15/2000		0.003 mg/L	CPB 19991210

Lab Comments:
 None

Handwritten notes:

Pb

5 - 13	13	22/2	680
4 - 9	9	11	620
3 - 5	5	Cu	1300
2 - 0/27	0		1/2
1 - 0	0		650

Pb₉₀ = 11
 Cu = 650
 Cu₉₀ = 500

RECEIVED
 MICH. DEPT. OF ENVIRONMENTAL QUALITY
 AUG 23 2000
 Drinking Water & Rad. Protection
 Division - COMMUNITY WATER SUPPLY SECTION

Michigan Department of Environmental Quality

DWRP Laboratory Services - Drinking Water Lab
USEPA Region V Drinking Water Lab Cert. No. MI00003
P.O. Box 30270, Lansing, MI 48909-7770

TEL: 517/335-8184 FAX: 517/335-8562

Official Laboratory Report

Report To:

Howard Higley
PO Box 175
Bear Lake MI 49614

Sample Number: C2000041795
Customer Number: 02452100

System Name/Owner: BEAR LAKE VILLAGE

WSSN / Pool ID: 0510

Collection Address: 12068 Wise Street, Bear Lake 49614

Source: Type I

Collected By: BURTON WARE

Site Code:

Twp/Sec/Well #: Bear Lake/ ? / ?

Collector: Private Citizen

County: Manistee

Sample Date: 08/10/2000 12:00:00AM

Sample Point:

Received: 08/14/2000 8:27:00AM

Sample Kit #: 30

Purpose: Routine Monitoring

Chlorination: Yes

Water System: Treated Public Distribution

Test Result	Analyte Name	Tested	Limit MCL	Rpt Limit	Test Performed
0.47 mg/L	COPPER	08/15/2000		0.05 mg/L	CMCU 20000104
Not Detected	LEAD BY ICP/MS	08/15/2000		0.003 mg/L	CPB 19991210

Lab Comments:
None

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AUG 23 2000

Drinking Water & Rad. Protection
Division - COMMUNITY WATER SUPPLY SECTION

Michigan Department of Environmental Quality

DWRP Laboratory Services - Drinking Water Lab
USEPA Region V Drinking Water Lab Cert. No. MI00003
P.O. Box 30270, Lansing, MI 48909-7770

TEL: 517/335-8184 FAX: 517/335-8562

Official Laboratory Report

Report To:

Howard Higley
PO Box 175
Bear Lake MI 49614

Sample Number: C2000041796
Customer Number: 02452100

System Name/Owner: BEAR LAKE VILLAGE
Collection Address: 12036 Lynn Street, Bear Lake 49614
Collected By: ELROY URBANUS
Twp/Sec/Well #: Bear Lake/ ? / ?
County: Manistee
Sample Point:
Sample Kit #: 30
Chlorination: Yes

WSSN / Pool ID: 0510
Source: Type I
Site Code:
Collector: Private Citizen
Sample Date: 08/10/2000 12:00:00AM
Received: 08/14/2000 8:27:00AM
Purpose: Routine Monitoring
Water System: Treated Public Distribution

Test Result	Analyte Name	Tested	Limit MCL	Rpt Limit	Test Performed
0.68 mg/L	COPPER	08/15/2000		0.05 mg/L	CMCU 20000104
Not Detected	LEAD BY ICP/MS	08/15/2000		0.003 mg/L	CPB 19991210

Lab Comments:
None

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AUG 23 2000

Drinking Water & Rad. Protection
Division - COMMUNITY WATER SUPPLY SECTION

Michigan Department of Environmental Quality

DWRP Laboratory Services - Drinking Water Lab
USEPA Region V Drinking Water Lab Cert. No. MI00003
P.O. Box 30270, Lansing, MI 48909-7770

TEL: 517/335-8184 FAX: 517/335-8562

Official Laboratory Report

Report To:

Howard Higley
PO Box 175
Bear Lake MI 49614

Sample Number: C2000041797
Customer Number: 02452100

System Name/Owner: BEAR LAKE VILLAGE

WSSN / Pool ID: 0510

Collection Address: 12051 West Street, Bear Lake 49614

Source: Type I

Collected By: ED WALBURN

Site Code:

Twp/Sec/Well #: Bear Lake/ ? / ?

Collector: Private Citizen

County: Manistee

Sample Date: 08/10/2000 12:00:00AM

Sample Point:

Received: 08/14/2000 8:27:00AM

Sample Kit #: 30

Purpose: Routine Monitoring

Chlorination: Yes

Water System: Treated Public Distribution

Test Result	Analyte Name	Tested	Limit MCL	Rpt Limit	Test Performed
0.27 mg/L	COPPER	08/15/2000		0.05 mg/L	CMCU 20000104
0.005 mg/L	LEAD BY ICP/MS	08/15/2000		0.003 mg/L	CPB 19991210

Lab Comments:
None

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AUG 23 2000

Drinking Water & Rad. Protection
Division - COMMUNITY WATER SUPPLY SECTION

Michigan Department of Environmental Quality

DWRP Laboratory Services - Drinking Water Lab
USEPA Region V Drinking Water Lab Cert. No. MI00003
P.O. Box 30270, Lansing, MI 48909-7770

TEL: 517/335-8184 FAX: 517/335-8562

Official Laboratory Report

Report To:

Howard Higley
PO Box 175
Bear Lake MI 49614

Sample Number: C2000041798
Customer Number: 02452100

System Name/Owner: BEAR LAKE VILLAGE
Collection Address: 7828 Locust Street, Bear Lake 49614
Collected By: ALAN ANDERSON
Twp/Sec/Well #: Bear Lake/ ???
County: Manistee
Sample Point:
Sample Kit #: 30
Chlorination: Yes

WSSN / Pool ID: 0510
Source: Type I
Site Code:
Collector: Private Citizen
Sample Date: 08/10/2000 12:00:00AM
Received: 08/14/2000 8:27:00AM
Purpose: Routine Monitoring
Water System: Treated Public Distribution

Test Result	Analyte Name	Tested	Limit MCL	Rpt Limit	Test Performed
0.46 mg/L	COPPER	08/15/2000		0.05 mg/L	CMCU 20000104
0.009 mg/L	LEAD BY ICP/MS	08/15/2000		0.003 mg/L	CPB 19991210

Lab Comments:
None

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MICH. DEPT. OF ENVIRONMENTAL QUALITY

AUG 23 2000

Drinking Water & Rad. Protection
Division - COMMUNITY WATER SUPPLY SECTION



JOHN ENGLER, Governor
DEPARTMENT OF ENVIRONMENTAL QUALITY
 HOLLISTER BUILDING, PO BOX 30473, LANSING MI 48909-7973
 RUSSELL J. HARDING, Director

REPLY TO:
 DRINKING WATER & RADIOLOGICAL
 PROTECTION DIVISION
 3423 N MARTIN L KING JR BLVD
 PO BOX 30630
 LANSING MI 48909-8130

October 28, 1996

Mr. Keith Rupert, Council President
 Village of Bear Lake
 P.O. Box 175
 Bear Lake, Michigan 49614

WSSN: 0510

Dear Mr. Rupert:

Subject: Water Supply Lead and Copper Results

This letter is to acknowledge receipt of the village of Bear Lake's lead and copper results for the monitoring period of July 1, 1996, to September 30, 1996.

The certification sheet accompanying these results stated five samples were required from your distribution system, and five samples were collected from Tier III sites. The 90th percentile of these sample results was calculated as 0.0045 mg/l for lead and 0.52 mg/l for copper. These results are below 0.015 mg/l lead and 1.3 mg/l copper action levels established by the U.S. Environmental Protection Agency (EPA). The average, maximum, and minimum concentrations for these samples were 0.0018 mg/l, 0.009 mg/l, and 0.0 mg/l for lead; and 0.282 mg/l, 0.63 mg/l, and 0.08 mg/l for copper.

Based on these results, no further action is required until the first round of triennial monitoring which is from June 1, 1998, to September 30, 2000. The collection of five samples during the summer (June 1 through September 30) of 1998, or 1999, or 2000 is necessary to satisfy monitoring requirements for the next sampling period. Enclosed is another set of forms you can utilize to report these results.

Thank you for complying with these requirements in a timely manner.

Sincerely,

Patrick L. Cook, P.E., District Engineer
 Community Water Supply Section
 Drinking Water and Radiological
 Protection Division
 517-335-8552

PLC:lw
 Enclosure

cc: Manistee - Mason District Health Department



JOHN ENGLER, Governor

DEPARTMENT OF PUBLIC HEALTH

3423 N. MARTIN L. KING JR. BLVD.
P.O. BOX 30195, LANSING, MICHIGAN 48909

~~VERNICE DAVIS ANTHONY, MPH, Director~~
James K. Haveman, Jr., Acting Director

November 28, 1995

Mr. Keith Rupert, Council President
Village of Bear Lake
P.O. Box 175
Bear Lake, Michigan 49614

WSSN: 0510

Subject: Water Supply Lead and Copper Results

Dear Mr. Rupert:

This letter is to acknowledge receipt of Bear Lake's lead and copper results for the monitoring period of July 1, 1995, to June 30, 1996.

The certification sheet accompanying these results stated five samples were required from your distribution system, and five samples were collected from Tier III sites. The 90th percentile of these sample results was calculated as 0.0 mg/l for lead and 0.445 mg/l for copper. These results are below 0.015 mg/l lead and 1.3 mg/l copper action levels established by the U.S. Environmental Protection Agency (EPA). The average, maximum, and minimum concentrations for these samples were all 0.0 mg/l for lead; and 0.316 mg/l, 0.55 mg/l, and 0.15 mg/l for copper.

Based on these results, no further action is required until the third round of reduced monitoring which is from July 1, 1996, to September 30, 1996. The collection of five samples during this three month period is necessary to satisfy annual monitoring requirements for the next year. Enclosed is another set of forms you can utilize to report these results.

Thank you for complying with these requirements in a timely manner.

Sincerely,

Patrick Cook

Patrick L. Cook
Area Engineer
Division of Water Supply
Bureau of Environmental and
Occupational Health

PLC:lw

Enclosure

cc: Manistee - Mason District Health Department



Brad



JOHN ENGLER, GOVERNOR
DEPARTMENT OF PUBLIC HEALTH

3423 N. LOGAN/MARTIN L. KING JR., BLVD.
P.O. BOX 30195, LANSING, MICHIGAN 48909

Vernice Davis Anthony, Director
October 11, 1993

Village of Bear Lake
Water Department
Bear Lake, Michigan 49614

WSSN: 0510

Attention: Mr. Keith Rupert, Council President

Subject: Water Supply Lead and Copper Results

Gentlemen:

This letter is to acknowledge receipt of the village of Bear Lake water supply lead and copper results for the monitoring period July 1, 1993, to December 31, 1993.

The certification sheet accompanying these results stated ten samples were required from your distribution system and ten samples were collected from Tier III sites. The 90th percentile of these sample results was calculated as 0.009 mg/l for lead and 1.06 mg/l for copper. These results are within the 0.015 mg/l lead and 1.3 mg/l copper action levels established by the U.S. Environmental Protection Agency (EPA). The average, maximum, and minimum concentrations for these samples were 0.008 mg/l, 0.039 mg/l, and 0.0 mg/l for lead; and 0.731 mg/l, 1.96 mg/l, and 0.10 mg/l for copper.

Based on these results, no further action is required until the second round of initial monitoring which is January 1, 1994, to June 30, 1994. Enclosed is another set of forms you can utilize to report these results.

Thank you for complying with these requirements in a timely manner.

Sincerely,

Patrick Cook

Patrick L. Cook
Area Engineer
Division of Water Supply
Bureau of Environmental and
Occupational Health

PLC:jo

Enclosure

cc: Manistee - Mason District Health Department





JOHN ENGLER, Governor

DEPARTMENT OF PUBLIC HEALTH

3423 N. LOGAN / MARTIN L. KING JR. BLVD.
P.O. BOX 30195, LANSING, MICHIGAN 48909

VERNICE DAVIS ANTHONY, MPH, Director
June 20, 1994

Mr. Keith Rupert, Council President
Village of Bear Lake
Water Department *P.O. Box 175*
Bear Lake, Michigan 49614

WSSN: 0510

Subject: Water Supply Lead and Copper Results

Dear Mr. Rupert:

This letter is to acknowledge receipt of the village's lead and copper results for the monitoring period of January 1, 1994, to June 30, 1994.

The certification sheet accompanying these results stated ten samples were required from your distribution system, and ten samples were collected from Tier III sites. The 90th percentile of these sample results was calculated as 0.015 mg/l for lead and 1.26 mg/l for copper. These results are at or below 0.015 mg/l lead and 1.3 mg/l copper action levels established by the U.S. Environmental Protection Agency (EPA). The average, maximum, and minimum concentrations for these samples were 0.0093 mg/l, 0.052 mg/l, and 0.0 mg/l for lead; and 0.856 mg/l, 3.92 mg/l, and 0.13 mg/l for copper.

Based on these results, no further action is required until the first round of reduced monitoring which is from July 1, 1994, to June 30, 1995. You must collect a minimum of five samples during this 12 month period. These samples must also be collected during the most vulnerable or warmest period, June through September. In other words, you can collect the next set of samples between July 1, 1994, and September 30, 1994, or in the month of June 1995. Enclosed is another set of forms you may utilize to report these results.

Thank you for complying with these requirements in a timely manner.

Sincerely,

A handwritten signature in black ink that reads "Patrick Cook".

Patrick L. Cook
Area Engineer
Division of Water Supply
Bureau of Environmental and
Occupational Health

PLC:lw

Enclosure

cc: Manistee - Mason District Health Department





JOHN ENGLER, Governor

DEPARTMENT OF PUBLIC HEALTH

3423 N. LOGAN / MARTIN L. KING JR. BLVD.
P.O. BOX 30195, LANSING, MICHIGAN 48909

VERNICE DAVIS ANTHONY, MPH, Director
November 28, 1994

Mr. Keith Rupert, Council President
Village of Bear Lake
P.O. Box 175
Bear Lake, Michigan 49614

WSSN: 0510

Subject: Water Supply Lead and Copper Results

Dear Mr. Rupert:

This letter is to acknowledge receipt of Bear Lake's lead and copper results for the monitoring period July 1, 1995, to June 30, 1995.

The certification sheet accompanying these results stated five samples were required from your distribution system, and five samples were collected from Tier III sites. The 90th percentile of these sample results was calculated as 0.004 mg/l for lead and 0.665 mg/l for copper. These results are at or below 0.015 mg/l lead and 1.3 mg/l copper action levels established by the U.S. Environmental Protection Agency (EPA). The average, maximum, and minimum concentrations for these samples were 0.0022 mg/l, 0.005 mg/l, and 0.0 mg/l for lead; and 0.484 mg/l, 0.73 mg/l, and 0.25 mg/l for copper.

Based on these results, no further action is required until the second round of reduced monitoring which is from July 1, 1995, to June 30, 1996. You must collect a minimum of 5 samples during this 12 month period. These samples must also be collected during the most vulnerable or warmest period, June through September. In other words, you can collect the next set of samples between July 1, 1995, and September 30, 1995, or in the month of June 1996. Enclosed is another set of forms you may utilize to report these results.

Thank you for complying with these requirements in a timely manner:

Sincerely,

A handwritten signature in cursive script that reads "Patrick Cook".

Patrick L. Cook
Area Engineer
Division of Water Supply
Bureau of Environmental and
Occupational Health

PLC:lw

Enclosure

cc: Manistee - Mason District Health Department

LEAD/COPPER REPORTING

1. **SYSTEM NAME:** Bear Lake Village 2. **WSSN:** 0510

3. **Population:** 2500 4. **MONITORING PERIOD:** From: 7/196 To: 6/97

5. **Minimum # of Samples Required:** 5 6. **# of Samples Taken:** 5

7. **NAME OF CERTIFIED LABORATORY:** MDPH

8. **SAMPLE CRITERIA:**

a. **Tier 2 or 3 Sites Used?** Yes No
(If yes, explain why below)

b. **Same sampling points used as in previous monitoring period (for 2nd and all subsequent monitoring periods)?** Yes No
(If no, explain why below)

c. **Minimum required number of lead service line samples taken (when applicable)?** Yes No (If no, explain why below)

Explanations:

no tier 1 sites in system

9. **CERTIFICATION:**

I hereby certify that to the best of my knowledge, all tap samples were collected in the manner specified by EPA lead/copper regulations (i.e., one liter first draw samples following at least six hours of stagnation and that where necessary, proper instructions were given for homeowner collection).

Signature: *Howard H. [Signature]*

Title: *Asst Water Sup* Date: *9/12/96*

10. TAP SAMPLING DATA: (Use additional sheets as needed)

System Name: Bear Lake Village WSSN: 0510

Results:

Sample Location	Site Code	Date	Sample Category *	Piping Materials		ppm (ppb)		LAB #
				Serv. Line **	Bldg. plmb. **	PB	CU	
12051 West St	A-1	7/30	6	C	C	ND	.41	✓
12999 Renning St	A-2	7/30	6	C	C&G	ND	.1	✓
7697 Main St	A-3	7/30	6	C&G	C&G	ND	.08	✓
12636 Lynn St	A-4	7/30	6	C	C	ND	.19	✓
7828 Locust St	A-5	7/30	6	C	C	.009	.63	✓

TO BE DETERMINED 90th X tile PB: 4.5
BY MDPH 90th X tile CU: 520

* Sample Category: Enter a number 1 through 6 to designate the category of tap sample site (see instructions for definitions)
 ** Materials used for service line and building plumbing: Enter C = copper; G = galvanized; L = lead; or, P = plastic

	PB	CU
70	4.5	520
Max	9	630
Min	0	80
Avg	1.8	282

LEAD/COPPER REPORTING

1. SYSTEM NAME: Bear Lake Village 2. WSSN: 0510
3. Population: 2500 4. MONITORING PERIOD: From: 7/95 To: 6/96
5. Minimum # of Samples Required: 5 6. # of Samples Taken: 5
7. NAME OF CERTIFIED LABORATORY: MDPH

8. SAMPLE CRITERIA:

- a. Tier 2 or 3 Sites Used? Yes No
(If yes, explain why below)
- b. Same sampling points used as in previous monitoring period (for 2nd and all subsequent monitoring periods)? Yes No
(If no, explain why below)
- c. Minimum required number of lead service line samples taken (when applicable)? Yes No (If no, explain why below)

Explanations:

no tier 1 sites in system

9. CERTIFICATION:

I hereby certify that to the best of my knowledge, all tap samples were collected in the manner specified by EPA lead/copper regulations (i.e., one liter first draw samples following at least six hours of stagnation and that where necessary, proper instructions were given for homeowner collection).

Signature: [Handwritten Signature]
Title: Ass Water Sup Date: 11/2

10. TAP SAMPLING DATA: (Use additional sheets as needed)

System Name: Bear Lake Village WSSN: 0510

Results:

<u>Sample Location</u>	<u>Site Code</u>	<u>Date</u>	<u>Sample Category</u> *	<u>Piping Materials</u>		<u>(ppb)</u>		<u>LAB</u> *
				<u>Serv. Line</u> **	<u>Bldg. plmb.</u> **	<u>PB</u>	<u>CU</u>	
12051 West St.	A-1	9/26	6	C	C	ND	.55	✓
12159 Penning St	A-2	9/26	6	C	C&G	ND	.27	✓
7697 Main St	A-3	9/27	6	C&G	C&G	ND	.15	✓
12036 Lynn St	A-5	9/26	6	C	C	ND	.27	✓
7828 Locust St	A-8	9/26	6	C	C	ND	.34	✓

TO BE DETERMINED 90th X tile PB: 0
BY MDPH 90th X tile CU: 445

* Sample Category: Enter a number 1 through 6 to designate the category of tap sample site (see instructions for definitions)
 ** Materials used for service line and building plumbing: Enter C = copper; G = galvanized; L = lead; or, P = plastic

	<u>PB</u>	<u>CU</u>
90	0	445
MAX	0	550
MIN	0	150
As	0	316

LEAD/COPPER REPORTING

1. SYSTEM NAME: Bear Lake Village 2. WSSN: 0510
3. Population: < 500 4. MONITORING PERIOD: From: 7/94 To: 6/95
5. Minimum # of Samples Required: 5 6. # of Samples Taken: 5
7. NAME OF CERTIFIED LABORATORY: MDPH

8. SAMPLE CRITERIA:

- a. Tier 2 or 3 Sites Used? Yes No
(If yes, explain why below)
- b. Same sampling points used as in previous monitoring period (for 2nd and all subsequent monitoring periods)? Yes No
(If no, explain why below)
- c. Minimum required number of lead service line samples taken (when applicable)? Yes No (If no, explain why below)

Explanations:

(A) No tier 1 sites in system

9. CERTIFICATION:

I hereby certify that to the best of my knowledge, all tap samples were collected in the manner specified by EPA lead/copper regulations (i.e., one liter first draw samples following at least six hours of stagnation and that where necessary, proper instructions were given for homeowner collection).

Signature: Howard Haggerty
Title: Asst. W. Supt. Date: 11/9/94

LEAD/COPPER REPORTING

1. SYSTEM NAME: VILLAGE OF BEAR LAKE 2. WSSN: 0510
 3. Population: <500 4. MONITORING PERIOD: From: 5/94 To: 12/94
 5. Minimum # of Samples Required: 10 6. # of Samples Taken: 10
 7. NAME OF CERTIFIED LABORATORY: MDPH

8. SAMPLE CRITERIA:

- a. Tier 2 or 3 Sites Used? Yes No
(if yes, explain why below)
- b. Same sampling points used as in previous monitoring period (for 2nd and all subsequent monitoring periods)? Yes No
(if no, explain why below)
- c. Minimum required number of lead service line samples taken (when applicable)? Yes No (if no, explain why below)

Explanations:

A - No Tier 1 Sites in System

9. CERTIFICATION:

I hereby certify that to the best of my knowledge, all tap samples were collected in the manner specified by EPA lead/copper regulations (i.e., one liter first draw samples following at least six hours of stagnation and that where necessary, proper instructions were given for homeowner collection).

Signature: 
 Title: Asst W Supt. Date: 6/13/94

10. TAP SAMPLING DATA: (Use additional sheets as needed)

System Name: BEAR LAKE VILLAGE WSSN: 0510

Results:

Sample Location	Site Code	Date	Sample Category *	Piping Materials		Pb ⁿ (ppb)		LAB #
				Serv. Line **	Bldg. Plmb. **	PB	CU	
12051 West	A-1	5/4	6	C	C	.003	.51	✓
12459 RONNING	A-2	5/4	6	C	C+L	.003	.62	✓
7647 MAIN	A-3	5/4	6	C+L	C+L	ND	.13	✓
12318 VIRGINIA	A-4	5/4	6	C	C+L	.007	.55	✓
12036 LYNN	A-5	5/4	6	C	C	.006	.39	✓
12207 LYNN	A-6	5/4	6	C	C+L	.015	3.92	✓
12143 SMITH	A-7	5/4	6	C	C	ND	1.26	✓
7828 LOCUST	A-8	5/4	6	C	C	.003	.15	✓
12064 WISE	A-9	5/4	6	C	C	.004	.50	✓
12114 MAPLE	A-10	5/4	6	C	C+L	.052	.53	✓
	B							

MICH. DEPT. OF PUBLIC HEALTH

JUN 17 1994

BUREAU OF ENVIRONMENTAL AND OCCUPATIONAL HEALTH

TO BE DETERMINED

BY MDPH

90th % tile PB: 15

90th % tile CU: 1260

- * Sample Category: Enter a number 1 through 6 to designate the category of tap sample site (see instructions for definitions)
- ** Materials used for service line and building plumbing: Enter C = copper; G = galvanized; L = lead; or, P = plastic

	Pb	Cu
90% tile	15	1260
Max	52	3920
Min	0	130
Avg	9.3	856

LEAD/COPPER REPORTING

1. SYSTEM NAME: BEAR LAKE VILLAGE 2. WSSN: 0510
3. Population: ³³⁹ < 500 4. MONITORING PERIOD: From: 5/93 To: 12/93
5. Minimum # of Samples Required: 10 6. # of Samples Taken: 10
7. NAME OF CERTIFIED LABORATORY: MDPH

8. SAMPLE CRITERIA:

- a. Tier 2 or 3 Sites Used? Yes No
(If yes, explain why below)
- b. Same sampling points used as in previous monitoring period (for 2nd and all subsequent monitoring periods)? Yes No
(If no, explain why below)
- c. Minimum required number of lead service line samples taken (when applicable)? Yes No (If no, explain why below)

Explanations:

- A. No TIER 1 Sites in SYSTEM
B. 1st Sampling

9. CERTIFICATION:

I hereby certify that to the best of my knowledge, all tap samples were collected in the manner specified by EPA lead/copper regulations (i.e., one liter first draw samples following at least six hours of stagnation and that where necessary, proper instructions were given for homeowner collection).

Signature: Howard H. [Signature]

Title: ~~Asst~~ Asst W. Sup

Date: 9/28/93

10. TAP SAMPLING DATA: (Use additional sheets as needed)

System Name: BEAR LAKE VILLAGE WSSN: 0510

Results:

Sample Location	Site Code	Date	Sample Category *	Piping Materials		PB	CU	LAB #
				Serv. Line **	Bldg. plmb. **			
12051 West	A-1	5/20	(6) 3	C	C	.004	.79	
12459 RONNIE	A-2	5/20	3	C	C+P	.009	1.05	
7647 MAIN	A-3	5/20	3	C+P	C+P	.005	.13	
12318 VIRGINIA	A-4	5/20	3	C	C+P	.006	.53	
12036 LYNN	A-5	5/20	3	C	C	.006	.62	
12207 LYNN	A-6	5/20	3	C	C+P	ND	1.06	
12143 SMITH	A-7	5/20	3	C	C	ND	1.96	
7828 LOCUST	A-8	5/20	3	C	C	.005	.61	
12064 WISE	A-9	5/20	3	C	C	.006	.46	
12114 MAPLE	A-10	5/20	✓ 3	C	C+P	.039	.10	

PPM
(Pb)

	Pb	Cu
90%u	9	1060
A-9	8	731
Max	39	1960
MIN	0	100

TO BE DETERMINED
BY MDPH

90th % tile PB: 9.0
90th % tile CU: 1060

* Sample Category: Enter a number 1 through 6 to designate the category of tap sample site (see instructions for definitions)
** Materials used for service line and building plumbing: Enter C = copper; G = galvanized; L = lead; or, P = plastic



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
DRINKING WATER LABORATORY
 USEPA Region V Drinking Water Cert. No. MI00003
 P.O. Box 30270
 Lansing, MI 48909
 TEL: (517) 335-8184
 FAX: (517) 335-8562

Sample Number
LC89938

Official Laboratory Report

Report To: BEAR LAKE VILLAGE
 PO BOX 175
 BEAR LAKE MI 49614

System Name/Owner: BEAR LAKE VILLAGE
 Collection Address: WELL 3, BEAR LAKE
 Collected By: HOWARD HIGLEY
 Township/Well#/Section: BEAR LAKE/3/
 County: Manistee
 Sample Point:
 Water System: Public System Well

WSSN/Pool ID: 0510
 Source: TYPE I
 Site Code:
 Collector: Public Water Supply Operator
 Date Collected: 08/11/2009 13:30
 Date Received: 08/12/2009 11:03
 Purpose: Routine Monitoring

TESTING INFORMATION			REGULATORY INFORMATION			
Analyte Name	Result (mg/L)	Date Tested	RL (mg/L)	MCL/AL (mg/L)	Method	CAS #

*** NOT TESTED *** Not Tested 08/31/2009 NOTST-00-C

Analysis for volatile organics could not be completed due to instrument failures. Please resample for CXVO. New vials with prepaid shipping are being sent.

Antimony	Not detected	08/14/2009	0.0006	0.006	EPA 200.8	7440-36-0
Arsenic	Not detected	08/14/2009	0.002	0.010	EPA 200.8	7440-38-2
Barium	0.01	08/14/2009	0.01	2	EPA 200.8	7440-39-3
Beryllium	Not detected	08/14/2009	0.0004	0.004	EPA 200.8	7440-41-7
Cadmium	Not detected	08/14/2009	0.0003	0.005	EPA 200.8	7440-43-9
Chromium	Not detected	08/14/2009	0.01	0.1	EPA 200.8	7440-47-3
Lead	Not detected	08/14/2009	0.001	0.015	EPA 200.8	7439-92-1
Mercury	Not detected	08/14/2009	0.0001	0.002	EPA 200.8	7439-97-6
Nickel	Not detected	08/14/2009	0.01	0.1	EPA 200.8	7440-02-0
Selenium	Not detected	08/14/2009	0.001	0.05	EPA 200.8	7782-49-2
Thallium	Not detected	08/14/2009	0.0002	0.002	EPA 200.8	7440-28-0

Carbamates by HPLC						
3 Hydroxycarbofuran	Not Detected	09/08/2009	0.001		EPA 531.2	16655-82-6
Aldicarb	Not Detected	09/08/2009	0.0005		EPA 531.2	116-06-3
Aldicarb sulfone	Not Detected	09/08/2009	0.0005		EPA 531.2	1646-88-4
Aldicarb sulfoxide	Not Detected	09/08/2009	0.0005		EPA 531.2	1646-87-3
Carbaryl	Not Detected	09/08/2009	0.001		EPA 531.2	63-25-2
Carbofuran	Not Detected	09/08/2009	0.0005	0.04	EPA 531.2	1563-66-2
Methiocarb	Not Detected	09/08/2009	0.001		EPA 531.2	2032-65-7
Methomyl	Not Detected	09/08/2009	0.001		EPA 531.2	16752-77-5
Oxamyl	Not Detected	09/08/2009	0.001	0.2	EPA 531.2	23135-22-0

CAS# : Chemical Abstract Service Registry Number	mg/L : milligrams / Liter (ppm)	Laboratory Contacts
MCL : Maximum Contaminant Level	ppm : parts per million	Drinking Water Unit Mgr: Julia Pieper
AL : Action Level	MPN : Most Probable Number	Systems Mgmt. Unit Mgr: George Kriszlian
RL : Reporting Limit	CFU : Colony Forming Unit	



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
 DRINKING WATER LABORATORY

USEPA Region V Drinking Water Cert. No. MI00003
 P.O. Box 30270
 Lansing, MI 48909
 TEL: (517) 335-8184
 FAX: (517) 335-8562

Sample Number
 LC89938

TESTING INFORMATION			REGULATORY INFORMATION			
Analyte Name	Result (mg/L)	Date Tested	RL (mg/L)	MCL/AL (mg/L)	Method	CAS #
Carbamates by HPLC						
Propoxur	Not Detected	09/08/2009	0.001		EPA 531.2	114-26-1
Chlorinated Acid Herbicides						
2,4,5-T	Not Detected	08/16/2009	0.002		EPA 515.4	93-76-5
2,4,5-TP (silvex)	Not Detected	08/16/2009	0.0003	0.05	EPA 515.4	93-72-1
2,4-D	Not Detected	08/16/2009	0.002	0.07	EPA 515.4	94-75-7
Acifluorfen	Not Detected	08/16/2009	0.004		EPA 515.4	50594-66-6
Bentazon	Not Detected	08/16/2009	0.002		EPA 515.4	25057-89-0
Dicamba	Not Detected	08/16/2009	0.002		EPA 515.4	1918-00-9
Dinoseb	Not Detected	08/16/2009	0.0003	0.007	EPA 515.4	88-85-7
Pentachlorophenol	Not Detected	08/16/2009	0.00006	0.001	EPA 515.4	87-86-5
Picloram	Not Detected	08/16/2009	0.001	0.5	EPA 515.4	1918-02-1
Total DCPA degradates, mono- and di-acid	Not Detected	08/16/2009	0.001		EPA 515.4	1861-32-1
Pesticides Analysis by GC/MS						
4,4'-DDD	Not Detected	08/18/2009	0.001		EPA 525.2	72-54-8
4,4'-DDE	Not Detected	08/18/2009	0.001		EPA 525.2	72-55-9
4,4'-DDT	Not Detected	08/18/2009	0.001		EPA 525.2	50-29-3
Acetochlor	Not Detected	08/18/2009	0.001		EPA 525.2	34256-82-1
Alachlor	Not Detected	08/18/2009	0.0002	0.002	EPA 525.2	15972-60-8
Aldrin	Not Detected	08/18/2009	0.0004		EPA 525.2	309-00-2
alpha-Chlordane	Not Detected	08/18/2009	0.0002	0.002	EPA 525.2	5103-71-9
alpha-Endosulfan	Not Detected	08/18/2009	0.001		EPA 525.2	959-98-8
Ametryn	Not Detected	08/18/2009	0.001		EPA 525.2	834-12-8
Atrazine	Not Detected	08/18/2009	0.0002	0.003	EPA 525.2	1912-24-9
beta-Endosulfan	Not Detected	08/18/2009	0.001		EPA 525.2	33213-65-9
Bromacil	Not Detected	08/18/2009	0.002		EPA 525.2	314-40-9
Butachlor	Not Detected	08/18/2009	0.002		EPA 525.2	23184-66-9
Butylate	Not Detected	08/18/2009	0.002		EPA 525.2	2008-41-5
Carboxin	Not Detected	08/18/2009	0.002		EPA 525.2	5234-68-4
Chlorothalonil	Not Detected	08/18/2009	0.001		EPA 525.2	1897-45-6
Cycloate	Not Detected	08/18/2009	0.002		EPA 525.2	1134-23-2
Cyprazine	Not Detected	08/18/2009	0.001		EPA 525.2	22936-86-3
Dieldrin	Not Detected	08/18/2009	0.0005		EPA 525.2	60-57-1
Diphenamid	Not Detected	08/18/2009	0.001		EPA 525.2	957-51-7
Endrin	Not Detected	08/18/2009	0.00005	0.002	EPA 525.2	72-20-8
Endrin aldehyde	Not Detected	08/18/2009	0.002		EPA 525.2	7421-93-4
EPTC	Not Detected	08/18/2009	0.001		EPA 525.2	759-94-4
gamma-Chlordane	Not Detected	08/18/2009	0.0002	0.002	EPA 525.2	5103-74-2

CAS# : Chemical Abstract Service Registry Number	mg/L : milligrams / Liter (ppm)	Laboratory Contacts
MCL : Maximum Contaminant Level	ppm : parts per million	Drinking Water Unit Mgr: Julia Pieper
AL : Action Level	MPN : Most Probable Number	Systems Mgmt. Unit Mgr: George Krisztian
RL : Reporting Limit	CFU : Colony Forming Unit	



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
 DRINKING WATER LABORATORY

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 P.O. Box 30270
 Lansing, MI 48909
 TEL: (517) 335-8184
 FAX: (517) 335-8562

Sample Number
 LC89938

TESTING INFORMATION			REGULATORY INFORMATION			
Analyte Name	Result (mg/L)	Date Tested	RL (mg/L)	MCL/AL (mg/L)	Method	CAS #
Pesticides Analysis by GC/MS						
Heptachlor	Not Detected	08/18/2009	0.00008	0.0004	EPA 525.2	76-44-8
Heptachlor epoxide	Not Detected	08/18/2009	0.00004	0.0002	EPA 525.2	1024-57-3
Hexachlorobenzene	Not Detected	08/18/2009	0.0001	0.001	EPA 525.2	118-74-1
Hexachlorocyclohexane (alpha-BHC)	Not Detected	08/18/2009	0.001		EPA 525.2	319-84-6
Hexachlorocyclohexane (beta-BHC)	Not Detected	08/18/2009	0.001		EPA 525.2	319-85-7
Hexachlorocyclohexane (delta-BHC)	Not Detected	08/18/2009	0.001		EPA 525.2	319-86-8
Hexachlorocyclopentadiene	Not Detected	08/18/2009	0.0002	0.05	EPA 525.2	77-47-4
Hexazinone	Not Detected	08/18/2009	0.003		EPA 525.2	51235-04-2
Lindane (gamma-BHC)	Not Detected	08/18/2009	0.00004	0.0002	EPA 525.2	58-89-9
Methoxychlor	Not Detected	08/18/2009	0.0001	0.04	EPA 525.2	72-43-5
Metolachlor	Not Detected	08/18/2009	0.001		EPA 525.2	51218-45-2
Metribuzin	Not Detected	08/18/2009	0.001		EPA 525.2	21087-64-9
Molinate	Not Detected	08/18/2009	0.002		EPA 525.2	2212-67-1
Octachlorocyclopentene	Not Detected	08/18/2009	0.002		EPA 525.2	706-78-5
PCB (aroclor 1016)	Not Detected	08/18/2009	0.0001	0.0005	EPA 525.2	12674-11-2
PCB (aroclor 1221)	Not Detected	08/18/2009	0.0001	0.0005	EPA 525.2	11104-28-2
PCB (aroclor 1232)	Not Detected	08/18/2009	0.0001	0.0005	EPA 525.2	11141-16-5
PCB (aroclor 1242)	Not Detected	08/18/2009	0.0001	0.0005	EPA 525.2	53469-21-9
PCB (aroclor 1248)	Not Detected	08/18/2009	0.0001	0.0005	EPA 525.2	12672-29-6
PCB (aroclor 1254)	Not Detected	08/18/2009	0.0001	0.0005	EPA 525.2	11097-69-1
PCB (aroclor 1260)	Not Detected	08/18/2009	0.0001	0.0005	EPA 525.2	11096-82-5
Polybrominated biphenyls	Not Detected	08/18/2009	0.001		EPA 525.2	59536-65-1
Prometon	Not Detected	08/18/2009	0.001		EPA 525.2	1610-18-0
Pronamide	Not Detected	08/18/2009	0.001		EPA 525.2	23950-58-5
Propachlor	Not Detected	08/18/2009	0.001		EPA 525.2	1918-16-7
Propazine	Not Detected	08/18/2009	0.001		EPA 525.2	139-40-2
Simazine	Not Detected	08/18/2009	0.0002	0.004	EPA 525.2	122-34-9
Tebuthiuron	Not Detected	08/18/2009	0.005		EPA 525.2	34014-18-1
Terbacil	Not Detected	08/18/2009	0.002		EPA 525.2	5902-51-2
Toxaphene	Not Detected	08/18/2009	0.001	0.003	EPA 525.2	8001-35-2
Trifluralin	Not Detected	08/18/2009	0.001		EPA 525.2	1582-09-8

CAS# : Chemical Abstract Service Registry Number	mg/L : milligrams / Liter (ppm)	Laboratory Contacts
MCL : Maximum Contaminant Level	ppm : parts per million	Drinking Water Unit Mgr: Julia Pieper
AL : Action Level	MPN : Most Probable Number	Systems Mgmt. Unit Mgr: George Krisztian
RL : Reporting Limit	CFU : Colony Forming Unit	



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 Lansing, MI 48909
 TEL: (517) 335-8184
 FAX: (517) 335-8562

Sample Number
 LC89938

TESTING INFORMATION			REGULATORY INFORMATION			
Analyte Name	Result (mg/L)	Date Tested	RL (mg/L)	MCL/AL (mg/L)	Method	CAS #

The analyses performed by the MDEQ Drinking Water Laboratory were conducted using methods approved by the U.S. Environmental Protection Agency in accordance with the Safe Drinking Water Act, 40 CFR parts 141-143, and other regulatory agencies as appropriate.

Your local health department has detailed information about the quality of drinking water in your area. If you have concerns about the health risks related to the test results of your sample, please contact the Environmental Health Section through the address and telephone number listed below:

District Health Department #10
 385 Third Street
 Manistee, MI 49660
 231 723-3595

CAS# : Chemical Abstract Service Registry Number	mg/L : milligrams / Liter (ppm)	Laboratory Contacts
MCL : Maximum Contaminant Level	ppm : parts per million	Drinking Water Unit Mgr: Julia Pieper
AL : Action Level	MPN : Most Probable Number	Systems Mgmt. Unit Mgr: George Krisztian
RL : Reporting Limit	CFU : Colony Forming Unit	



4125 Cedar Run Rd., Suite B
 Traverse City, MI 49684
 Phone 231-946-6767
 Fax 231-946-8741
 www.sosanalytical.com

COMPANY: VILLAGE OF BEAR LAKE

SOS PROJECT NO: 160386 - I
 SAMPLED BY: BEN HEYMES

NAME:
 PROJECT NO:
 WSSN: 0510
 WELL PERMIT:
 TAX ID:
 LOCATION: 7828 LOCUST ST

DATE RECEIVED: 2/3/2016
 TIME RECEIVED: 1:50 PM
 SAMPLE ID: KITCHEN-FIRST DRAW

BEAR LAKE
 MI
 COUNTY: MANISTEE

DATE SAMPLED: 2/3/2016
 TIME SAMPLED: 10:30 AM
 SAMPLE MATRIX: DRINKING WATER

TWP:

METALS

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>	<u>Digestion Method</u>	<u>Drinking Water Reg Limit(MCL)</u>
COPPER EPA 200.8	0.65	0.02	mg/L (PPM)	SW	2/4/2016		1.3
LEAD EPA 200.8	0.009	0.002	mg/L (PPM)	SW	2/4/2016		0.015

ND = NOT DETECTED
 LOD = LIMIT OF DETECTION
 CV = COLD VAPOR ANALYSIS
 SMCL = FEDERAL NON-ENFORCEABLE LIMIT
 MCL = MAXIMUM CONTAMINANT LEVEL
 DISS = DISSOLVED

APPROVED BY: Shanna Shea
 SHANNA SHEA
 LAB MANAGER

**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
DRINKING WATER LABORATORY**

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P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-8184
FAX: (517) 335-8562



**Sample Number
LF72140**

Official Laboratory Report

Report To: BEAR LAKE VILLAGE
7780 LAKE ST
PO BOX 175
BEAR LAKE MI 49614

System Name/Owner:	BEAR LAKE VILLAGE	WSSN/Pool ID:	0510
Collection Address:	12036 LYNN ST, BEAR LAKE	Source:	TYPE I
Collected By:	CAROL URBANUS	Site Code:	
Township/Well#/Section:	BEAR LAKE//	Collector:	Private Citizen
County:	Manistee	Date Collected:	07/09/2015 07:00
Sample Point:		Date Received:	07/11/2015 11:32
Water System:	Treated Public Distribution System	Purpose:	Routine Monitoring

TESTING INFORMATION			REGULATORY INFORMATION			
Analyte Name	Result (mg/L)	Date Tested	RL (mg/L)	MCL/AL (mg/L)	Method	CAS #
Copper	0.27	07/15/2015	0.05	1.3	EPA 200.8	7440-50-8
Lead	0.002	07/15/2015	0.001	0.015	EPA 200.8	7439-92-1

The analyses performed by the MDEQ Drinking Water Laboratory were conducted using methods approved by the U.S. Environmental Protection Agency in accordance with the Safe Drinking Water Act, 40 CFR parts 141-143, and other regulatory agencies as appropriate.

Your local health department has detailed information about the quality of drinking water in your area. If you have concerns about the health risks related to the test results of your sample, please contact the Environmental Health Section through the address and telephone number listed below:

**District Health Department #10
385 Third Street
Manistee, MI 49660
231 723-3595**

CAS# : Chemical Abstract Service Registry Number
MCL : Maximum Contaminant Level
AL : Action Level
RL : Reporting Limit

mg/L : milligrams / Liter (ppm)
ppm : parts per million
MPN : Most Probable Number
CFU : Colony Forming Unit

Laboratory Contacts
Drinking Water Unit Mgr: Julia Pieper
Systems Mgmt. Unit Mgr: George Krisztian

**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
DRINKING WATER LABORATORY**

USEPA Region V Drinking Water Cert. No. MI00003
P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-8184
FAX: (517) 335-8562



**Sample Number
LF72141**

Official Laboratory Report

Report To: BEAR LAKE VILLAGE
7780 LAKE ST
PO BOX 175
BEAR LAKE MI 49614

System Name/Owner:	BEAR LAKE VILLAGE	WSSN/Pool ID:	0510
Collection Address:	12459 RONNING ST, BEAR LAKE	Source:	TYPE I
Collected By:	RED RONNING	Site Code:	
Township/Well#/Section:	BEAR LAKE//	Collector:	Private Citizen
County:	Manistee	Date Collected:	07/07/2015 18:00
Sample Point:		Date Received:	07/11/2015 11:33
Water System:	Treated Public Distribution System	Purpose:	Routine Monitoring

TESTING INFORMATION			REGULATORY INFORMATION			
Analyte Name	Result (mg/L)	Date Tested	RL (mg/L)	MCL/AL (mg/L)	Method	CAS #
Copper	Not detected	07/15/2015	0.05	1.3	EPA 200.8	7440-50-8
Lead	0.001	07/15/2015	0.001	0.015	EPA 200.8	7439-92-1

The analyses performed by the MDEQ Drinking Water Laboratory were conducted using methods approved by the U.S. Environmental Protection Agency in accordance with the Safe Drinking Water Act, 40 CFR parts 141-143, and other regulatory agencies as appropriate.

Your local health department has detailed information about the quality of drinking water in your area. If you have concerns about the health risks related to the test results of your sample, please contact the Environmental Health Section through the address and telephone number listed below:

**District Health Department #10
385 Third Street
Manistee, MI 49660
231 723-3595**

CAS# : Chemical Abstract Service Registry Number
MCL : Maximum Contaminant Level
AL : Action Level
RL : Reporting Limit

mg/L : milligrams / Liter (ppm)
ppm : parts per million
MPN : Most Probable Number
CFU : Colony Forming Unit

Laboratory Contacts
Drinking Water Unit Mgr: Julia Pieper
Systems Mgmt. Unit Mgr: George Krisztian

**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
DRINKING WATER LABORATORY**

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Lansing, MI 48909
TEL: (517) 335-8184
FAX: (517) 335-8562



**Sample Number
LF72142**

Official Laboratory Report

Report To: BEAR LAKE VILLAGE
7780 LAKE ST
PO BOX 175
BEAR LAKE MI 49614

System Name/Owner:	BEAR LAKE VILLAGE	WSSN/Pool ID:	0510
Collection Address:	12064 WISE ST, BEAR LAKE	Source:	TYPE I
Collected By:	DIANE WARE	Site Code:	
Township/Well#/Section:	BEAR LAKE//	Collector:	Private Citizen
County:	Manistee	Date Collected:	07/08/2015 15:30
Sample Point:		Date Received:	07/11/2015 11:33
Water System:	Treated Public Distribution System	Purpose:	Routine Monitoring

TESTING INFORMATION			REGULATORY INFORMATION			
Analyte Name	Result (mg/L)	Date Tested	RL (mg/L)	MCL/AL (mg/L)	Method	CAS #
Copper	0.13	07/15/2015	0.05	1.3	EPA 200.8	7440-50-8
Lead	0.003	07/15/2015	0.001	0.015	EPA 200.8	7439-92-1

The analyses performed by the MDEQ Drinking Water Laboratory were conducted using methods approved by the U.S. Environmental Protection Agency in accordance with the Safe Drinking Water Act, 40 CFR parts 141-143, and other regulatory agencies as appropriate.

Your local health department has detailed information about the quality of drinking water in your area. If you have concerns about the health risks related to the test results of your sample, please contact the Environmental Health Section through the address and telephone number listed below:

**District Health Department #10
385 Third Street
Manistee, MI 49660
231 723-3595**

CAS# : Chemical Abstract Service Registry Number
MCL : Maximum Contaminant Level
AL : Action Level
RL : Reporting Limit

mg/L : milligrams / Liter (ppm)
ppm : parts per million
MPN : Most Probable Number
CFU : Colony Forming Unit

Laboratory Contacts
Drinking Water Unit Mgr: Julia Pieper
Systems Mgmt. Unit Mgr: George Krisztian

**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
DRINKING WATER LABORATORY**

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Lansing, MI 48909
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**Sample Number
LF72143**

Official Laboratory Report

Report To: BEAR LAKE VILLAGE
7780 LAKE ST
PO BOX 175
BEAR LAKE MI 49614

System Name/Owner:	BEAR LAKE VILLAGE	WSSN/Pool ID:	0510
Collection Address:	7828 LOCUST ST, BEAR LAKE	Source:	TYPE I
Collected By:	ALAN ANDERSON	Site Code:	
Township/Well#/Section:	BEAR LAKE//	Collector:	Private Citizen
County:	Manistee	Date Collected:	07/08/2015 08:00
Sample Point:		Date Received:	07/11/2015 11:33
Water System:	Treated Public Distribution System	Purpose:	Routine Monitoring

TESTING INFORMATION			REGULATORY INFORMATION			
Analyte Name	Result (mg/L)	Date Tested	RL (mg/L)	MCL/AL (mg/L)	Method	CAS #
Copper	0.86	07/15/2015	0.05	1.3	EPA 200.8	7440-50-8
Lead	0.024	07/15/2015	0.001	0.015	EPA 200.8	7439-92-1

The analyses performed by the MDEQ Drinking Water Laboratory were conducted using methods approved by the U.S. Environmental Protection Agency in accordance with the Safe Drinking Water Act, 40 CFR parts 141-143, and other regulatory agencies as appropriate.

Your local health department has detailed information about the quality of drinking water in your area. If you have concerns about the health risks related to the test results of your sample, please contact the Environmental Health Section through the address and telephone number listed below:

**District Health Department #10
385 Third Street
Manistee, MI 49660
231 723-3595**

CAS# : Chemical Abstract Service Registry Number
MCL : Maximum Contaminant Level
AL : Action Level
RL : Reporting Limit

mg/L : milligrams / Liter (ppm)
ppm : parts per million
MPN : Most Probable Number
CFU : Colony Forming Unit

Laboratory Contacts
Drinking Water Unit Mgr: Julia Pieper
Systems Mgmt. Unit Mgr: George Krisztian

**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
DRINKING WATER LABORATORY**

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Lansing, MI 48909
TEL: (517) 335-8184
FAX: (517) 335-8562



**Sample Number
LF72144**

Official Laboratory Report

Report To: BEAR LAKE VILLAGE
7780 LAKE ST
PO BOX 175
BEAR LAKE MI 49614

System Name/Owner:	BEAR LAKE VILLAGE	WSSN/Pool ID:	0510
Collection Address:	12051 WEST ST, BEAR LAKE	Source:	TYPE I
Collected By:	ED WALBURN	Site Code:	
Township/Well#/Section:	BEAR LAKE//	Collector:	Private Citizen
County:	Manistee	Date Collected:	07/08/2015 06:00
Sample Point:		Date Received:	07/11/2015 11:33
Water System:	Treated Public Distribution System	Purpose:	Routine Monitoring

TESTING INFORMATION			REGULATORY INFORMATION			
Analyte Name	Result (mg/L)	Date Tested	RL (mg/L)	MCL/AL (mg/L)	Method	CAS #
Copper	0.34	07/15/2015	0.05	1.3	EPA 200.8	7440-50-8
Lead	0.005	07/15/2015	0.001	0.015	EPA 200.8	7439-92-1

The analyses performed by the MDEQ Drinking Water Laboratory were conducted using methods approved by the U.S. Environmental Protection Agency in accordance with the Safe Drinking Water Act, 40 CFR parts 141-143, and other regulatory agencies as appropriate.

Your local health department has detailed information about the quality of drinking water in your area. If you have concerns about the health risks related to the test results of your sample, please contact the Environmental Health Section through the address and telephone number listed below:

**District Health Department #10
385 Third Street
Manistee, MI 49660
231 723-3595**

CAS# : Chemical Abstract Service Registry Number
MCL : Maximum Contaminant Level
AL : Action Level
RL : Reporting Limit

mg/L : milligrams / Liter (ppm)
ppm : parts per million
MPN : Most Probable Number
CFU : Colony Forming Unit

Laboratory Contacts
Drinking Water Unit Mgr: Julia Pieper
Systems Mgmt. Unit Mgr: George Krisztian